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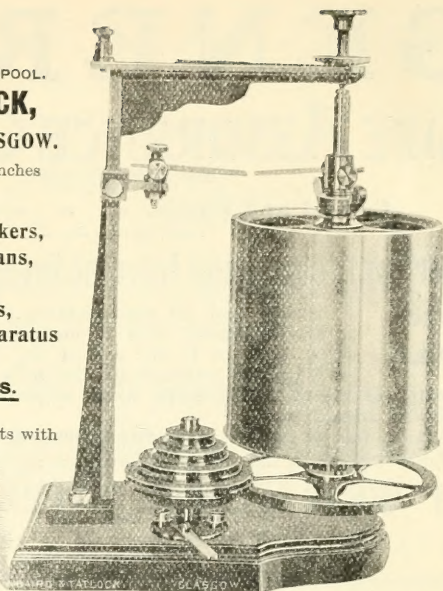
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FOR THE YEAR

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JAMES MACLEHOSE AND SONS, 61 ST. VINCENT ST.
Publishers and Booksellers to the University
1906

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AUGUST 1906.

1	W
2	Th
3	F
4	S
5	S
6	M
7	Tu
8	W
9	Th
10	F
11	S
12	S
13	M
14	Tu
15	W
16	Th
17	F
18	S
19	S
20	M
21	Tu
22	W
23	Th
24	F
25	S
26	S
27	M
28	Tu
29	W
30	Th
31	F

Names of Candidates for Highland Society's Bursaries to be given in as directed on pp. 415, 421.

SEPTEMBER 1906.

1	S	{ Names of Candidates for A. and B. Stewart Bursaries, for Bursaries in the gift of the Merchants' House, for Hutchesons' Educational Trust Bursaries, for Glasgow City Educational Endowments Bursaries, for James Laing Bursaries, for Marshall Trust Bursaries, for Pratt Bursary, for William Whyte Bursary, and for Hannay Bursary to be given in as directed at pp. 366, 414, 415, 416. Names of Candidates for Ferguson Scholarships to be given in before this day.
2	S	
3	M	
4	Tu	
5	W	
6	Th	{ Names of Candidates for Preliminary Examination in Arts, Science, and Medicine, and Names of Competitors for Bursaries, to be given in to Assistant-Clerk (Matriculation Office).
7	F	
8	S	
9	S	
10	M	
11	Tu	{ Names of Candidates for First, Second, and Third Professional Examinations in Medicine, for B.Sc. Examinations in Science, and for Certificate in Engineering Science, to be given in to Assistant-Clerk (Matriculation Office).
12	W	
13	Th	
14	F	
15	S	
16	S	{ Names of Candidates for Degrees in Arts and Law, and for Scholarships, etc., to be given in to Assistant-Clerk (Matriculation Office).
17	M	
18	Tu	
19	W	
20	Th	
21	F	Examination for Macdonald Bursary.
22	S	
23	S	
24	M	
25	Tu	
26	W	{ Preliminary and Bursary Examinations begin. (See pp. 211, 414.) Degree Examinations—Mathematics (Ord. and Hon.).
27	Th	
28	F	
29	S	
30	S	
		Degree Examinations—Education, Astronomy, Geology.

OCTOBER 1906.

1	M	Theses for M.D. given in. Names of Candidates for Examination for M.D. to be given in. [This entry will not be repeated in 1907.]
2	Tu	Degree Examinations—History (Hon.), Mathematics (Hon.), Astronomy, Zoology, Chemistry, Materia Medica, Mining I., Engineering Laboratory, Electrical Engineering, Geology, Constitutional Law, Civil (or Roman) Law.
3	W	Competition for Lorimer Bursaries in Medicine. (Continued on 2nd.) Degree Examinations—Moral Philosophy (Ord. and Hon.), History (Hon.), Botany, Physics, Anatomy, Physiology, Pathology, Public Health Laboratory, Engineering Drawing, Naval Architecture, Ship Design, Geology (Practical), Mining II., Scots Law, Public International Law.
4	Th	Degree Examinations—Logic (Ord. and Hon.), History (Hon.), Political Economy, Economic Science (Agric.), Engineering, Electrical Engineering, Medical Jurisprudence and Public Health, Vital Statistics, Public Health Laboratory, Sanitary Law, Philosophy of Law, International Private Law.
5	F	Meeting of University Court. Appointment of Preliminary Examiners and Members of Joint Board for next year. Appointment of Committees and of Representatives at Charitable and other Boards.
6	S	Degree Examinations—History (Ord. and Hon.), English Literature (Hon.), Mental Philosophy (Hon.), Engineering, Medicine in relation to Public Health, Practical Sanitation, Mining III., Conveyancing, Forensic Medicine.
7	S	Preliminary Examinations end.
8	M	Additional Examinations in German and French for Bursaries.
9	Tu	Degree Examinations—Natural Philosophy (Ord. and Hon.), English Literature (Hon.), French (Hon.), German (Hon.), Agriculture, Agricultural Entomology, Mercantile Law.
10	W	Examination for Arnott Prizes at 2 P.M.
11	Th	Additional Examinations in Mathematics, Latin, and Greek for Bursaries.
12	F	Degree Examinations—English Literature (Ord. and Hon.), Classics (Hon.), Natural Philosophy (Hon.), Veterinary Hygiene.
13	S	Additional Examination in Dynamics for Bursaries.
14	S	Meeting of Joint Board.
15	M	
16	Tu	
17	W	Matriculation begins.
18	Th	Names of Candidates for Degree of B.D. and for Bursaries, etc., in Theology to be given in to Assistant-Clerk (Matriculation Office).
19	F	Results of Bursary Competition declared.
20	S	Opening of Winter Session. [Committees.
21	S	Meeting of Senate—Election of Senate Members of Library and other
22	M	
23	Tu	Examinations for B.D., and for Bursaries in Theology, 1st day. (See pp. 295, [424.]
24	W	Do. do., 2nd day.
25	Th	
26	F	
27	S	
28	S	
29	M	
30	Tu	
31	W	Applications for admission as Research Students to be lodged with the Clerk of Senate. Last day for giving in University Prize Essays. (Last Wednesday.) Meeting of General Council.

NOVEMBER 1906.

1	Th	Meeting of University Court.
2	F	
3	S	
4	\$	
5	M	{ Names of Candidates for Diploma in Education to be given in to Assistant-Clerk (Matriculation Office).
6	Tu	
7	W	
8	Th	{ Meeting of Senate. Graduation. Representatives at Charitable and other Boards elected.
9	F	Close of Matriculation and of Enrolment in Classes.
10	S	
11	\$	
12	M	
13	Tu	
14	W	
15	Th	
16	F	Examination for Diploma in Education.
17	S	
18	\$	
19	M	
20	Tu	
21	W	

NOVEMBER 1906.

22	Th
23	F
24	S
25	S
26	M
27	Tu
28	W
29	Th
30	F

DECEMBER 1906.

1	S
2	S
3	M
4	Tu
5	W
6	Th
7	F
8	S
9	S
10	M
11	Tu
12	W
13	Th
14	F
15	S
16	S
17	M
18	Tu
19	W
20	Th
21	F
22	S
23	S
24	M
25	Tu
26	W
27	Th
28	F
29	S
30	S
31	M

Meeting of Senate. Vacancies in Bursaries ascertained.

Meeting of the University Court. Appointment of Director of Samaritan Hospital, Director of Eye Infirmary, and Member of Committee of West of Scotland Marine Biological Association.

Christmas Holidays commence.

JANUARY 1907.

1	Tu	
2	W	
3	Th	
4	F	
5	S	
6	S	
7	M	
8	Tu	
9	W	First day on which the Classes meet after the Christmas Holidays.
10	Th	{ Meeting of Senate. Intimation from the several Faculties of the Election of Deans. Appointment of Principal and Deans Committee. Appointment of Boards of Studies. Vacant Bursaries filled up. Report by Faculty of Arts on Logan Medal.
11	F	
12	S	Applications for Higher Degrees in Arts and Science (D.Litt., D.Phil., and D.Sc.) to be sent in to Clerk of Senate.
13	S	
14	M	
15	Tu	
16	W	
17	Th	Meeting of University Court.
18	F	Close of Enrolment in Classes which begin after Christmas Holidays.
19	S	
20	S	
21	M	
22	Tu	
23	W	
24	Th	
25	F	
26	S	
27	S	
28	M	Holiday (Monday after last Friday of January).
29	Tu	Holiday (for Candlemas).
30	W	
31	Th	

FEBRUARY 1907.

1	F	Theses for M.D. to be sent in.
2	S	
3	S	
4	M	
5	Tu	
6	W	
7	Th	{ Meeting of Senate. Reports of Committees on Honorary Degrees. Arrangements for Summer Session.
8	F	
9	S	
10	S	
11	M	
12	Tu	
13	W	
14	Th	{ (Second Thursday.) Meeting of University Court. Arrangements for Summer Session.
15	F	
16	S	
17	S	
18	M	
19	Tu	
20	W	
21	Th	
22	F	
23	S	
24	S	
25	M	Holiday (Monday after last Friday of February).
26	Tu	
27	W	
28	Th	

MARCH 1907.

1	F	Reports on Prize Essays.
2	S	
3	S	
4	M	
5	Tu	
6	W	
7	Th	{ Meeting of Senate. Schemes of Courses in Arts, Science, and Medicine to be sent by Professors and Lecturers to Conveners of Boards of Studies.
8	F	{ Names of Candidates for Preliminary Examination in Arts, Science, and Medicine, to be given in to Assistant-Clerk (Matriculation Office).
9	S	
10	S	
11	M	
12	Tu	{ Names of Candidates for Degrees in Arts and Law to be given in to Assistant-Clerk (Matriculation Office).
13	W	
14	Th	{ Names of Candidates for First, Second, and Third Professional Examinations in Medicine, for B.Sc. Examinations in Science, and for Certificate in Engineering Science, to be given in to Assistant-Clerk (Matriculation Office). Meeting of University Court.
15	F	
16	S	
17	S	
18	M	
19	Tu	
20	W	
21	Th	{ Meeting of Senate. Election of Commissioner to General Assembly. Snell Examiners appointed. Appointment to 1851 Exhibition Research Scholarship.
22	F	Report on College Buildings by the Master of Works.
23	S	
24	S	
25	M	
26	Tu	
27	W	
28	Th	Close of Winter Session.
29	F	{ Names of Candidates for Degree of B.D. to be given in to Assistant-Clerk (Matriculation Office). Preliminary Examinations in Arts, Science, and Medicine begin. (See p. 211.) Degree Examination—Mathematics (Ord. and Hon.).
30	S	{ Degree Examinations—Education, Astronomy, Geology. Returns from Teachers of Elocution.
31	S	

APRIL 1907.

1	M	{ Degree Examinations—History (Hon.), Mathematics (Hon.), Astronomy, Zoology, Chemistry, Materia Medica, Mining I., Engineering Laboratory, Electrical Engineering, Geology, Constitutional Law, Civil (or Roman) Law.
2	Tu	{ Degree Examinations—Moral Philosophy (Ord. and Hon.), History (Hon.), Botany, Physics, Anatomy, Physiology, Pathology, Public Health Laboratory, Engineering Drawing, Naval Architecture, Ship Design, Geology (Practical), Mining II., Scots Law, Public International Law.
3	W	{ (First Wednesday.) Meeting of General Council. Degree Examinations—Logic (Ord. and Hon.), History (Hon.), Political Economy, Economic Science (Agric.), Engineering, Electrical Engineering, Medical Jurisprudence and Public Health, Vital Statistics, Public Health Laboratory, Sanitary Law, Philosophy of Law, International Private Law.
4	Th	{ Preliminary Examinations end. Degree Examinations—History (Ord. and Hon.), English Literature (Hon.), Mental Philosophy (Hon.), Engineering, Medicine in relation to Public Health, Practical Sanitation, Mining III., Conveyancing, Forensic Medicine, Divinity, Textual Criticism.
5	F	{ Degree Examinations—Natural Philosophy (Ord. and Hon.), English Literature (Hon.), French (Hon.), German (Hon.), Agriculture, Agric. Entomology, Mercantile Law, Church History, Hermeneutics.
6	S	{ Last day for returning Books to the Library. Degree Examinations—English Literature (Ord. and Hon.), Classics (Hon.), Natural Philosophy (Hon.), Veterinary Hygiene.
7	§	
8	M	Degree Examinations—Latin (Ord. and Hon.).
9	Tu	{ Degree Examinations—German (Ord. and Hon.). Meeting of Senate.
10	W	Degree Examinations—French (Ord. and Hon.).
11	Th	{ Degree Examinations—Greek (Ord. and Hon.). Meeting of University Court. Meeting of Classical and Modern Languages Committees of Joint Board.
12	F	{ Degree Examinations—Hebrew (Arts). Meeting of Joint Board.
13	S	Meeting of Joint Board.
14	§	
15	M	
16	Tu	
17	W	
18	Th	Library re-opened.
19	F	{ Names of Candidates for Diploma in Education to be given in to Assistant-Clerk (Matriculation Office).
20	S	

APRIL 1907.

21	S	
22	M	
23	Tu	Graduation. Distribution of University Prizes.
24	W	{ Meeting of Senate. Election of Clerk of Senate and Assistant Clerks. Summer Session begins.
25	Th	
26	F	
27	S	
28	S	
29	M	
30	Tu	

MAY 1907.

1	W	
2	Th	Meeting of University Court.
3	F	Examination for Diploma in Education.
4	S	
5	S	
6	M	
7	Tu	Close of Matriculation and Enrolment in Classes.
8	W	
9	Th	
10	F	
11	S	
12	S	
13	M	
14	Tu	
15	W	
16	Th	
17	F	
18	S	
19	S	
20	M	
21	Tu	
22	W	
23	Th	
24	F	
25	S	{ Last day for Professors sending in names of Assistants for 1907-8 to Secretary of University Court.
26	S	
27	M	Holiday—Monday after Pentecost Friday of May.
28	Tu	
29	W	
30	Th	{ Names of Candidates for Final Professional Examination in Medicine to be given in to Assistant-Clerk (Matriculation Office).
31	F	{ Last day for Professors and Lecturers sending in to Secretary of Uni- versity Court estimates of the expenses of their Departments for next year.

JUNE 1907.

1	S	Theses for M.D. given in. ¹
2	S	
3	M	
4	Tu	
5	W	
6	Th	Meeting of University Court. Appointment of Lecturers, and of
7	F	University Assistants.
8	S	
9	S	
10	M	
11	Tu	
12	W	
13	Th	
14	F	
15	S	
16	S	
17	M	
18	Tu	
19	W	Degree Examinations—Practice of Medicine, Surgery.
20	Th	Do. Midwifery; Clinical Examinations begin.
21	F	
22	S	
23	S	
24	M	
25	Tu	
26	W	
27	Th	
28	F	
29	S	
30	S	

JULY 1907.

1	M	
2	Tu	
3	W	
4	Th	Meeting of University Court.
5	F	Close of Summer Session.
6	S	
7	S	
8	M	
9	Tu	
10	W	
11	Th	
12	F	
13	S	
14	S	
15	M	
16	Tu	
17	W	
18	Th	
19	F	
20	S	
21	S	
22	M	
23	Tu	Meeting of Senate. Graduation in Medicine.
24	W	
25	Th	
26	F	
27	S	
28	S	
29	M	
30	Tu	
31	W	

¹ This is the last date in the year 1907 at which Theses for M.D. can be lodged.

UNIVERSITY OFFICERS.

	Elected.	Electors.
<i>Chancellor</i> —THE RIGHT HON. LORD KELVIN, G.C.V.O., LL.D., - - - - -	1904	General Council.
<i>Vice-Chancellor</i> —ROBERT HERBERT STORY, D.D., LL.D., - - - - -	1898	Chancellor.
<i>Rector</i> —THE RIGHT HONOURABLE HERBERT H. ASQUITH, M.P., - - - - -	1905	{ Matriculated Students.
<i>Principal</i> —ROBERT HERBERT STORY, D.D., LL.D.,	1898	Crown.
<i>Dean of Faculties</i> —SIR JAMES KING, BART., LL.D., - - - - -	1904	Senate.
<i>Parliamentary Representative</i> —SIR HENRY CRAIK, K.C.B., LL.D., - - - - -	1906	General Council.

University Court.

THE RECTOR, <i>ex officio</i>.	|	THE PRINCIPAL, <i>ex officio</i> .
THE LORD PROVOST OF GLASGOW, <i>ex officio</i> .		
	Elected.	Electors.
H. E. GORDON, B.A. - - -	1904	Chancellor.
WILLIAM LORIMER, - - -	1905	Rector.
ALEXANDER MURRAY, C.A., -	1906	{ Lord Provost, Magistrates, and Town Council of Glasgow.
D. C. M'VAIL, M.B., - - -	1891	{ General Council.
W. ROBERTSON COPLAND, - -	1900	
DAVID MURRAY, LL.D., - - -	1903	
JOHN HUTCHISON, LL.D., - -	1905	
PROFESSOR STEWART, D.D., - -	1889	{ Senate.
PROFESSOR MUIR, M.A., M.D., -	1903	
PROFESSOR JONES, LL.D., - - -	1904	
PROFESSOR GRAY, LL.D., - - -	1904	

Senatus Academicus.¹

PRESIDENT, - - -	THE PRINCIPAL, - - -	1898
PROFESSORS.		
	CHAIRS.	Appointed
Henry Martyn Beckwith Reid, D.D.,	<i>Divinity</i> , - - -	1903
George G. Ramsay, LL.D., ² - - -	<i>Humanity</i> , - - -	1863
William Stewart, D.D., - - -	<i>Biblical Criticism</i> , - -	1873
Sir Thomas M'Call Anderson, M.D., -	<i>Practice of Medicine</i> , -	1900 ³

¹ See note at foot of next page.

² Professor Ramsay has intimated his intention to resign before the beginning of session 1906-7.

³ Professor Anderson occupied the Chair of Clinical Medicine from 1874 till he was appointed to the Chair of Practice of Medicine in 1900.

PROFESSORS— <i>Continued.</i>	CHAIRS.	Appointed
John Ferguson, M.A., LL.D., F.S.A., -	<i>Chemistry,</i> -	- 1874
John Gray M ^c Kendrick, M.D., LL.D., } F.R.S., ¹ - - - - - }	<i>Physiology,</i> -	- 1876
James Robertson, D.D., - - - - - {	<i>Hebrew and Semitic</i> <i>Languages,</i> - }	1877
John Cleland, M.D., LL.D., D.Sc., F.R.S.,	<i>Anatomy,</i> -	- 1877
William Jack, LL.D., D.Sc., - -	<i>Mathematics,</i> -	- 1879
Frederick O. Bower, Sc.D., F.R.S., -	<i>Botany,</i> -	- 1885
Archibald Barr, D.Sc., - - - - - {	<i>Civil Engineering</i> <i>and Mechanics,</i> }	1889
James Moir, LL.D., - - - - -	<i>Conveyancing,</i> -	- 1889
John Harvard Biles, LL.D., - - - {	<i>Naval Architecture,</i> <i>including Marine</i> <i>Engineering,</i> }	1891
Sir William Macewen, D.Sc. (Oxon.), } LL.D., F.R.S., - - - - - }	<i>Surgery,</i> -	- 1892
Ludwig Becker, Ph.D., - - - -	<i>Astronomy,</i> -	- 1893
Murdoch Cameron, M.D., - - - -	<i>Midwifery,</i> -	- 1894
Henry Jones, LL.D., Litt.D., F.B.A., -	<i>Moral Philosophy,</i> -	- 1894
William Smart, D.Phil., LL.D., -	<i>Political Economy,</i> -	- 1896
Ralph Stockman, M.D., - - - -	<i>Materia Medica,</i> -	- 1897
John Glaister, M.D., - - - -	<i>Forensic Medicine,</i> -	- 1898
James Cooper, D.D., - - - -	<i>Church History,</i> -	- 1898
Robert Muir, M.A., M.D., - - - -	<i>Pathology,</i> -	- 1899
John S. Phillimore, M.A., - - - -	<i>Greek,</i> -	- 1899
Andrew Gray, LL.D., F.R.S., -	<i>Natural Philosophy,</i>	1899
Dudley J. Medley, M.A., - - - -	<i>History,</i> -	- 1899
Sir Hector C. Cameron, M.D., - -	<i>Clinical Surgery,</i> -	- 1900
Samson Gemmell, M.D., - - - -	<i>Clinical Medicine,</i> -	- 1900
Robert Latta, M.A., D.Phil., - -	<i>Logic and Rhetoric,</i> -	- 1902
John Graham Kerr, M.A., - - - -	<i>Zoology,</i> -	- 1902
William Macneile Dixon, Litt.D., - {	<i>English Language</i> <i>and Literature,</i> }	1904
John Walter Gregory, D.Sc., F.R.S., -	<i>Geology,</i> -	- 1904
William Murray Glog, B.A., - - - -	<i>Law,</i> -	- 1905

¹ Professor M^cKendrick has intimated his intention to resign before the beginning of session 1906-7.

Note.—"The precedence of the Masters in point of ceremony shall, in all time coming, be, that the Professor of Divinity take place first after the Principal, and that all the other Masters and Professors of whatever kind take place of other according to the seniority and time of their admissions into their respective offices."—*Statute of Royal Visitation, 1727.*

Deans of the several Faculties.

<i>Arts</i> , - - - - -	Professor Phillimore.
<i>Science</i> , - - - - -	Professor Graham Kerr.
<i>Medicine</i> , - - - - -	Professor Stockman.
<i>Law</i> , - - - - -	Professor Moir.
<i>Theology</i> , - - - - -	Professor Stewart.

Lecturers.

A. C. Bradley, LL.D., - - -	{ <i>Natural Theology</i> (Gifford Foundation), 1906-8.
Ernest F. Scott, B.D., - - -	{ <i>Apologetics</i> (Alexander Robertson Foundation), 1906-7.
A. H. Charteris, LL.B., - - -	{ <i>Public International Law</i> .
James A. McCallum, LL.B., - - -	{ <i>International Private Law</i> .
Wm. S. McKechnie, LL.B., D.Phil., - - -	{ <i>General Jurisprudence</i> .
James M. Irvine, LL.B., - - -	{ <i>Constitutional Law and History</i> .
William Shaw, - - - - -	{ <i>Civil Law</i> .
Robert Lamond, LL.B., - - -	{ <i>Mercantile Law</i> .
Thomas Barr, M.D., - - -	{ <i>Evidence and Procedure</i> .
J. Walker Downie, M.B., - - -	{ <i>Diseases of the Ear</i> .
Landel R. Oswald, M.B., C.M., - - -	{ <i>Diseases of the Throat and Nose</i> .
* Thomas H. Bryce, M.A., M.D., - - -	{ <i>Insanity</i> .
* William MacLennan, M.B., C.M., - - -	{ <i>Anatomy</i> .
* Charles Workman, M.D., - - -	{ <i>Materia Medica</i> .
* J. H. Pringle, F.R.C.S., - - -	{ <i>Pathology</i> .
* Walter K. Hunter, D.Sc., M.D., - - -	{ <i>Surgery</i> .
* A. M. Ramsay, M.D., - - -	{ <i>Practice of Medicine</i> .
* David McCorrie, L.R.C.P.S., - - -	{ <i>Diseases of the Eye</i> .
* Herbert W. Bolam, B.Sc., Ph.D., - - -	{ <i>Bacteriology</i> .
Frederick Soddy, M.A., - - -	{ <i>Chemistry</i> .
Edward P. Cathcart, M.D., - - -	{ <i>Physical Chemistry</i> .
Charles Latham, - - - - -	{ <i>Physiological Chemistry</i> (Grieve Foundation).
John Clark, M.A., - - - - -	{ <i>Mining</i> (Dixon Foundation).
Charles Martin, M.A. (Paris), O.A., - - -	{ <i>Education</i> .
George P. Thistlethwaite, B.A., Ph.D., - - -	{ <i>French Language and Literature</i> .
Fernando Agnoletti, D.Litt., - - -	{ <i>German Language and Literature</i> .
George Henderson, Ph.D., - - -	{ <i>Italian Language and Literature</i> .
	{ <i>Celtic Language and Literature</i> .

* Lecturers at Queen Margaret College.

Lecturers in 1905-6.

James F. Gemmill, M.A., M.D.,	-	-	<i>Embryology.</i>
William K. Hutton, M.A., M.B., C.M.,	-	-	<i>Regional Anatomy.</i>
Walter Colquhoun, M.A., M.B., C.M.,	{	-	<i>Physiology of Nerve and Muscle.</i>
* W. H. Lang, D.Sc., M.B., C.M.,	-	-	<i>Botany.</i>
G. W. Walker, M.A.,	-	-	<i>Physics.</i>
T. S. Patterson, Ph.D.,	-	-	<i>Organic Chemistry.</i>
C. E. Fawsitt, D.Sc., Ph.D.,	-	-	<i>Metallurgical Chemistry.</i>
John S. Nicholson, B.Sc.,	-	-	<i>Electrical Engineering.</i>
Henry Bamford, M.Sc.,	-	-	{ <i>Engineering Drawing and Design.</i>
James Muir, D.Sc., M.A.,	-	-	- <i>Electricity, Pure and Applied.</i>
David K. Picken, M.A.,	-	-	{ <i>Mathematics.</i>
Robert J. T. Bell, M.A., B.Sc.,	-	-	-
Robert G. Nisbet, M.A.,	-	-	{ <i>Humanity.</i>
Daniel Rankin, B.A.,	-	-	-
William Rennie, M.A.,	-	-	- <i>Greek.</i>
Thomas H. Weir, B.D.,	-	-	{ <i>Hebrew and Arabic or Syriac.</i>
* John L. Morison, M.A.,	-	-	{ <i>English Language and Literature.</i>
Ritchie Girvan, M.A.,	-	-	- <i>Anglo-Saxon.</i>
Kenneth K. M. Leys, B.A.,	-	-	- <i>British History.</i>
Robert A. Duff, M.A., D.Phil.,	-	-	- <i>Political Philosophy.</i>
* Norman Smith, M.A., D.Phil.,	-	-	- <i>Logic.</i>
* John W. Scott, M.A.,	-	-	- <i>Moral Philosophy.</i>

Boards of Studies.—1906-7.

In Arts. *Language and Literature.*—The Principal, the Dean of the Faculty of Arts, Professors Ramsay, Robertson, and Dixon, Messrs. Martin, Thistlethwaite, Nisbet, Rankin, Rennie, Weir, Agnoletti, Morison, and Girvan.—Professor Phillimore, *Convener*.

Mental Philosophy.—The Principal, the Dean of the Faculty of Arts, Professors Jones, Smart, and Latta, Drs. R. A. Duff, and Norman Smith, and Messrs. M'Callum, Clark, and Scott.—Professor Jones, *Convener*.

Science.—The Principal, the Dean of the Faculty of Arts, Professors Ferguson, Jack, Bower, Becker, Gray, Kerr, and Gregory, Drs. Bolam, Lang, Patterson, Fawsitt, and Messrs. Soddy and Gwynne-Vaughan.—Professor Jack, *Convener*.

* Lecturers at Queen Margaret College.

History and Law.—The Principal, the Dean of the Faculty of Arts, Professors Medley and Dixon, Dr. M'Kechnie, and Messrs. Irvine and Leys.—Professor Medley, *Convener*.

English (Language, Literature, and British History).—The Principal, the Dean of the Faculty of Arts, Professors Ramsay, Medley, and Dixon, Dr. M'Kechnie, and Messrs. Morison, Leys, and Girvan.—Professor Dixon, *Convener*.

Economic Science.—The Principal, the Dean of the Faculty of Arts, Professors Jones, Smart and Medley, Drs. M'Kechnie and Duff, and Messrs. Irvine and M'Callum.—Professor Smart, *Convener*.

In Science.—Professors Ferguson, M'Kendrick, Cleland, Jack, Bower, Barr, Biles, Becker, Glaister, Gray, Kerr, and Gregory, Drs. Fawsitt, Muir, Lang, Bolam, Bryce, Patterson, Cathcart, and Colquhoun, and Messrs. G. W. Walker, Bamford, Nicholson, Latham, Soddy, and Gwynne-Vaughan.—Professor Graham Kerr, *Convener*.

In Medicine.—Professors Sir Thomas M. Anderson, Ferguson, M'Kendrick, Cleland, Bower, Sir William Macewen, Murdoch Cameron, Stockman, Glaister, Muir, Gray, Sir Hector C. Cameron, Gemmell, and Kerr, Mr. G. W. Walker, Drs. Thomas Barr, Downie, Oswald, Hutton, Workman, A. M. Ramsay, Bryce, Pringle, MacLennan, J. F. Gemmill, Bolam, Lang, Hunter, Cathcart, Colquhoun, Patterson, and Mr. Gwynne-Vaughan.—the Dean of the Faculty of Medicine, *Convener*.

University Assistants or Demonstrators in 1905-6.

<i>Humanity,</i>	-	-	-	-	{ Robert G. Nisbet, M.A.
					{ Daniel Rankin, B.A.
<i>Greek,</i>	-	-	-	-	- William Rennie, M.A.
<i>English Language and Literature,</i>	-	-	-	-	{ J. L. Morison, M.A.
					{ Ritchie Girvan, M.A.
<i>French,</i>	-	-	-	-	- Léon Pitoy, L. ès L.Phil.
<i>Hebrew and Semitic Languages,</i>					- Thomas H. Weir, B.D.
<i>Logic,</i>	-	-	-	-	- Norman Smith, M.A., D.Phil.
<i>Moral Philosophy,</i>	-				{ Robert A. Duff, M.A., D.Phil.
					{ John W. Scott, M.A.
<i>Political Economy,</i>	-	-			- Thomas Jones, M.A.
<i>Mathematics,</i>	-	-	-		{ David K. Picken, M.A.
					{ Robert J. T. Bell, M.A., B.Sc.
					{ G. W. Walker, M.A.
<i>Natural Philosophy,</i>	-				{ James Muir, D.Sc., M.A.
					{ James G. Gray, B.Sc.
<i>Arnott and Thomson Demonstrator in Experimental Physics,</i>	-	-	-	-	{ James Muir, D.Sc., M.A.

<i>History,</i>	-	-	-	-	Kenneth K. M. Leys, B.A.
<i>Civil Engineering and Me-</i>	{	-	-	-	Harry Bamford, M.Sc.
<i>chanics,</i>					John S. Nicholson, B.Sc.
					Thos. B. Morley, B.Sc.
<i>Naval Architecture,</i>	-	-	-	-	John G. Johnstone, B.Sc.
<i>Geology,</i>	-	-	-	-	G. W. Tyrrell.
<i>Botany,</i>	{	-	-	-	William H. Lang, D.Sc., M.B., C.M.
					D. T. Gwynne-Vaughan, M.A.
					Malcolm Wilson, B.Sc.
<i>Zoology,</i>	{	-	-	-	E. J. Bles, B.A., B.Sc.
					R. A. Staig.
					W. E. Agar, B.A.
Baxter Demonstrator in <i>Geology,</i>					William R. Wiseman, M.A., B.Sc.
<i>Chemistry,</i>	{	-	-	-	T. S. Patterson, Ph.D.
					Charles E. Fawsitt, D.Sc., Ph.D.
					James Roberts, F.C.S.
<i>Anatomy,</i>	{	-	-	-	James F. Gemmill, M.A., M.D.
					William K. Hutton, M.A., M.B., C.M.
					Archibald N. M'Lellan, M.B., C.M.
					George M. Gray, M.B., Ch.B.
<i>Physiology,</i>	{	-	-	-	Walter Colquhoun, M.A., M.B., C.M.
					(Muirhead Demonstrator).
<i>Materia Medica.</i>	{	-	-	-	Geo. H. Clark, M.B., Ch.B., D.P.H.
					Francis J. Charteris, M.B., Ch.B.
<i>Pathology,</i>	{	-	-	-	John H. Teacher, M.A., M.D.
					John S. Dunn, M.A., M.B.
					Leonard Findlay, M.D., Ch.B.
<i>Forensic Medicine,</i>	-	-	-	-	George A. Brown, M.B., C.M., D.P.H.
<i>Surgery,</i>	-	-	-	-	J. A. C. Macewen, B.Sc., M.B., C.M.
<i>Clinical Surgery</i> (Sir William Macewen),					J. A. C. Macewen, B.Sc., M.B., C.M.
	-	-	-	-	Peter Paterson, M.B., C.M.
<i>Clinical Surgery</i> (Sir H. C. Cameron),					Alfred A. Young, M.A., M.B., C.M.
<i>Practice of Medicine,</i>	{	-	-	-	William R. Jack, B.Sc., M.D.
					John S. M'Kendrick, M.D.
<i>Clinical Medicine</i> (Dr. Anderson),					William R. Jack, B.Sc., M.D.
	-	-	-	-	James Hinshelwood, M.A., M.D.
<i>Clinical Medicine</i> (Dr. Gemmell),					James C. M'Clure, M.B., C.M.
<i>Midwifery,</i>	{	-	-	-	John M. M. Kerr, M.B., C.M.
					Samuel J. Cameron, M.B., Ch.B.
<i>Diseases of the Ear,</i>	-	-	-	-	J. Stoddart Barr, M.B., Ch.B.
<i>Conveyancing,</i>	-	-	-	-	William Guy.

Examiners for Degrees.

In Divinity.—The Professors in the Faculty of Theology, assisted by the Rev. John Maclean, D.D., and the Rev. Henry Bremner, D.D.

In Law.—The Professors and Lecturers in the Faculty of Law, assisted by

John A. Todd, B.L.,	-	-	-	-	1904
Hugh R. Buchanan, LL.B.,	-	-	-	-	1905
A. P. Higgins, LL.D.,	-	-	-	-	1905
Douglas A. Bannatyne, LL.B.,	-	-	-	-	1905

In Medicine.—The Professors and Lecturers in the Faculty of Medicine, as specified in Section XXIV. of Ordinance No. 14, and the following Additional Examiners:—

Sidney F. Harmer, D.Sc.	1903	Walter E. Dixon, M.D.	1905
J. B. Farmer, D.Sc.	1904	J. Lorrain Smith, M.D.	1905
Alexander Macphail, M.B.	1904	Sir James Barr, M.D.	1905
John C. McVail, M.D.	1904	Alexander Napier, M.D.	1905
William Duncan, M.D.	1904	P. T. B. Beale, F.R.C.S.	1905
A. L. Selby, M.A.	1905	David N. Knox, M.B.	1905
D. Noel Paton, M.D.	1905	Thomas Gray, D.Sc.	1905

In Arts.—The Professors and Lecturers in the Faculty of Arts, as specified in Section XIV. of Ordinance No. 13, assisted by the following Additional Examiners:—

Sidney F. Harmer, D.Sc.,	-	-	Zoology,	-	-	1903
Thomas W. Allen, M.A.,	-	-	Classics,	-	-	1904
David H. Crawford, M.A.,	-	-	Classics,	-	-	1905
G. D. Hicks, M.A., Ph.D.,	-	-	{ Logic and Moral }	-	-	1904
W. L. Jones, M.A.,	-	-	{ Philosophy, - }	-	-	1904
John A. Todd, B.L.,	-	-	English,	-	-	1904
Arthur L. Smith, M.A.,	-	-	Political Economy,	-	-	1904
Duncan MacGillivray, M.A.,	-	-	History,	-	-	1904
F. J. Amours, B.A.,	-	-	Education,	-	-	1904
Karl Breul, M.A., Litt.D., Ph.D.,	-	-	French,	-	-	1904
John Maclean, D.D.,	-	-	German,	-	-	1904
William Rollo, M.A.,	-	-	Hebrew,	-	-	1904
J. B. Farmer, D.Sc.,	-	-	Arabic,	-	-	1904
Peter Pinkerton, M.A.,	-	-	Botany,	-	-	1904
A. L. Selby, M.A.,	-	-	Mathematics,	-	-	1905
Thomas Gray, D.Sc.,	-	-	Natural Philosophy,	-	-	1905
Hugh R. Buchanan, LL.B.,	-	-	Chemistry,	-	-	1905
A. P. Higgins, LL.D.,	-	-	Roman Law,	-	-	1905
John W. Evans, D.Sc.,	-	-	{ Philosophy of Law, }	-	-	1905
			{ Constitutional Law & }	-	-	1905
			{ History, - }	-	-	1905
			Geology,	-	-	1906

In Science.—Professor Ferguson, LL.D., Professor M'Kendrick, M.D., Professor Cleland, M.D., Professor Jack, LL.D., Professor Bower, Sc.D., Professor Barr, D.Sc., Professor Biles, LL.D., Professor Becker, Ph.D., Professor Gray, LL.D., Professor Kerr, M.A., Professor Gregory, D.Sc., and additional examiners.

Preliminary Examiners in Arts, Science, and Medicine.—Professor Ramsay, LL.D., Professor Jack, LL.D., Professor Phillimore, M.A., Professor Medley, M.A., †Professor Dixon, Litt.D., †Arthur D. Millar, M.A., Robert J. T. Bell, M.A., B.Sc., William Rennie, B.A., Daniel Rankin, B.A., †Charles Martin, M.A., F. J. Amours, B.A., George P. Thistlethwaite, Ph.D., Karl Breul, Litt.D., †John Miller, M.A., John Maclean, D.D., Easton S. Valentine, M.A., Archd. Revie, Wm. Rollo, M.A.

Examiners for Diploma in Education.

John Clark, M.A., and A. R. Andrew, M.A., H.M.I.S., 1905.

Other Officials.

<i>Secretary to the University</i>	{	Alan E. Clapperton, B.L., 91 West Court, - - - -	Regent Street.
<i>Clerk of Senate,</i>	{	- - - -	Professor Stewart, D.D., 18 Annfield Terrace, Partickhill.
<i>Assistants to the Clerk of Senate,</i>	{	- - - -	W. Innes Addison. Albert Morrison. Miss Galloway, Secretary at Queen Margaret College.
<i>Registrar of the General Council,</i>	{	- - - -	W. Innes Addison, Matriculation Office.
<i>Clerk of the General Council,</i>	{	- - - -	Archibald Craig, LL.B., 149 West George Street.
<i>Librarian,</i>	- - - -	- - - -	James L. Galbraith.
<i>Sub-Librarian,</i>	- - - -	- - - -	Mungo Ferguson, M.A., William Weatherston, William G. Macdonald.
<i>Assistant Librarians,</i>	- - - -	- - - -	Robert M. Burdon. Irving M. Morgan, M.A.
<i>Honorary Curator of Hunterian Coins,</i>	- - - -	- - - -	George Macdonald, LL.D.
<i>Under-Keeper of Hunterian Museum,</i>	- - - -	- - - -	John Mackay.
<i>Factors,</i>	- - - -	- - - -	Hill & Hoggan, 194 Ingram Street.
<i>Law-Agents,</i>	- - - -	- - - -	Mitchells, Johnston & Co., 160 West George Street.

† Members of the Joint Board.

<i>Auditors,</i>	-	-	-	{	Brown, Fleming & Murray, 163 West George Street.
<i>Publishers and Booksellers to</i>				{	James MacLehose & Sons, 61 St.
<i>the University,</i>	-	-	-	{	Vincent Street.
<i>Printers to the University,</i>	-	-	-	{	Robert MacLehose & Co. Ltd., Anniesland.
<i>Organist,</i>	-	-	-	-	Harold Ryder, 258 Bath Street.
<i>Robe Makers to the Univer-</i>				{	James Thomson & Son, 191 West
<i>sity,</i>	-	-	-	{	George Street.
<i>Master of Works,</i>	-	-	-	-	John Stitt.
<i>Bedellus,</i>	-	-	-	-	William Finlayson.

Representatives of the University Court on Charitable and other Boards.

General Medical Council—Professor Sir Thomas M. Anderson, M.D.
Western Infirmary—Sir Matthew Arthur, Bart., and Mr. David Johnston.

Victoria Infirmary—Dr. M'Vail and John Hutchison, LL.D.

Glasgow Eye Infirmary—Sir William Macewen, D.Sc. (Oxon.), M.D.

Glasgow Samaritan Hospital for Women—Dr. M'Vail.

West of Scotland Agricultural College—Dr. M'Vail.

Highlands and Islands Educational Trust—H. P. Macmillan, LL.B., Advocate.

Stirling Educational Trust—Mr. Charles King.

West of Scotland Biological Association—Prof. Graham Kerr, M.A.

Glasgow Atheneum Commercial College—Prof. Smart, D.Phil., LL.D.

Representatives of the Senate on Educational and other Boards.

Glasgow and West of Scotland Technical College—Professors Bower and Gray.

West of Scotland Agricultural College—Professor Stewart.

Glasgow City Educational Endowments Board—Professor Stewart.

Glasgow General Educational Endowments Board—Professors Stewart and Medley.

Glasgow School of Art—Professor Moir.

Hutchesons' Educational Trust—Professor Ramsay.

John Clark (Mile-End) Bursary Trust—Professor Stewart.

Scott Scholarship and Bursaries Trust—Professors Ramsay and Dixon.

Western Infirmary—Professors Jones and M'Kendrick.

Royal Infirmary—Professor Glaister.

Asylum for the Blind—Professor Ramsay.

Glasgow Convalescent Home—Professor Murdoch Cameron.

Baillie's Institution—Professor Ferguson.

Haldane Trust—Professor Ramsay.

Joint Committees of Senate and Court.

LIBRARY COMMITTEE.—*Convener*, Professor Latta.

Appointed by the Senate—Professors Medley, Glaister, Cooper, Latta, Kerr, and Phillimore.

Appointed by the University Court—Dr. David Murray, Mr. W. R. Copland, and Dr. John Hutchison.

MUSEUMS COMMITTEE.—*Convener*, The Principal.

Appointed by the Senate—The Principal and Professors Cleland, Bower, and Kerr.

Appointed by the University Court—Dr. M'Vail and Henry E. Gordon.

OBSERVATORY AND LABORATORIES COMMITTEE.—

Convener, Professor Gray.

Appointed by the Senate—Professors Ferguson, M'Kendrick, Becker, and Gray.

Appointed by the University Court—Mr. W. R. Copland and Mr. Henry E. Gordon.

The Carnegie Trust for the Universities of Scotland.

Trustee representing Glasgow University—Professor Stewart.

Committee on Civil Service and other External Examinations.

Professors Jack, Bower, Jones, Smart, Phillimore, Gray, Medley, and Latta, and Mr. J. M. Irvine—Professor Medley, *Convener and Secretary*.

Glasgow Provincial Committee for the Training of Teachers.

Chairman—Professor Latta. *Director*—Mr. John Clark, M.A.
(See page 672.)

Students' Representative Council.

President—Robert H. Napier, M.A.

Vice-Presidents—J. C. Watson and R. E. Lee, M.A.

Secretary—Henry G. B. Spens, M.A., The Union.

Treasurer—Joseph Davidson, M.A.

Conveners of Grand Committees—James H. Cockburn, M.A. (Divinity); R. M. Grant, M.A. (Law); C. P. Williamson (Medicine); A. Gordon (Science); A. Black (Arts); Florence M. M'Neil (Queen Margaret).

Conveners of Standing Committees—*Amusements*, J. R. M'Gilvray; *Lodgings*, A. D. Muir; *Book Exchange*, N. M'Caig, M.A.

Editor of Magazine—A. Browning.

I.—THE UNIVERSITY.

The University of Glasgow is a corporate body, which has always included a Chancellor, Rector, Dean of Faculties, Principal, Professors, and Students. It was originally founded, like most other ancient establishments of the same nature, by the authority of the See of Rome. Pope Nicholas V., by a bull, dated the seventh of January, 1450-1, erects and establishes in Glasgow a "*Studium Generale . . . tam in theologia ac jure canonico et civili, quam in artibus, et quavis alia licita facultate.*" He then declares that this University shall have the same power of creating Masters and Doctors as any other "*studium generale*" in Christendom, and appoints the Bishop of Glasgow and his successors, Chancellors and Rectors by his authority. In the same year a body of statutes was prepared, and the University established by the exertions of the Bishop and his Chapter. It consisted, at this time, of the Chancellor and Rector, of various Masters and Doctors in the Faculties of Theology, Canon Law, and the Arts; and, lastly, of the incorporated students in these Faculties, who might be promoted to the same degrees in each, after following out the course of study prescribed in the statutes.

The University, at this time, had received no endowments, and was possessed of no property, except a University purse, into which were put some small perquisites on conferring degrees, and the patronage of two or three small chaplainries. It continued, however, to discharge its important functions with great zeal and activity, and attracted a greater number of members than could well have been expected in that rude period of society. The University Records contain little information as to lectures delivered in the Higher Faculties, or the number of the students who attended them. But we learn that within three or four years after the establishment of the University, so many young men were matriculated in the Faculty of Arts, that it was thought expedient to provide a house in which they

might reside, and to secure a regular set of teachers for their instruction.

The house provided for the accommodation of the students in Arts was known by the name of Pædagogium, or the College of Arts. It is said to have been situated in the Rottenrow; but in the year 1460, James, Lord Hamilton, bequeathed to Mr. Duncan Bunch, principal Regent of the College of Arts, and his successors, Regents, for the use of the said College, a tenement in the High Street, with four acres of land adjoining. In buildings situated on this ground the classes of the University continued to meet for upwards of four hundred years.

The Reformation produced at first great disorder in the University, its members being clergymen of the Catholic persuasion, and its chief support being derived from the Church. In 1577, James VI. prescribed very particular rules with regard to the College and the form of its government, and made a considerable addition to its funds. The charter by which the king made these regulations, and gave that property, is known by the name of *Nova Erectio*.

By this charter, provision was made for the support of a Principal, who was to teach Theology and the Holy Scriptures, and was also Professor of Hebrew and Syriac, and three Regents, of whom one was to teach Greek and Rhetoric, another Dialectics, Morals, and Politics, with the Elements of Arithmetic and Geometry, and the third, who was also Sub-Principal, was to teach all the branches of Physiology and Geography, Chronology and Astrology. The Regents were to keep each by his own Profession, so that the student had a new Regent every year.¹

From this small beginning, the University continued to prosper till the era of the Restoration, having at that time, besides the Principal, two Professors of Theology, one of Medicine, four Regents or Professors of Philosophy, and one of Humanity, a Librarian, with a tolerable Library, an increased number of Bursars and of other students of all ranks. At the Restoration, however, being deprived of a great part of its revenues in consequence of the re-establishment of Episcopacy, three of the Professorships fell into abeyance, and the College was again reduced to a Principal,

¹This system was altered in 1642, in accordance with the practice of the other Universities; but returned to after the Revolution. The four classes necessary to Graduation in Arts were called—the first, Bajan; the second, Semi; the third, Baccalour; the fourth, Magistrand.

a Professor of Theology, and four Regents. This state of matters continued till the Revolution, when the University again began to prosper after a long period of depression.¹ In the next thirty years seven Professorships were either originally founded or revived, viz.:—those of Mathematics (1691), Humanity (1706), Oriental Languages (1709), Civil Law (1712), Medicine (1712), Church History (1716), and Anatomy (1718); and to these a Professorship of Astronomy was added in 1760. The following eighteen Professorships were founded during the nineteenth century, viz.:—Natural History, (1807), Surgery (1815), Midwifery (1815), Chemistry (1817), Botany (1818), Materia Medica (1831), Institutes of Medicine (1839), Forensic Medicine (1839), Civil Engineering (1840), Conveyancing (1861), English Language and Literature (1861), Divinity and Biblical Criticism (1861), Clinical Surgery (1874), Clinical Medicine (1874), Naval Architecture (1883), History (1893), Pathology (1893), Political Economy (1896). In 1903 the Chair of Geology was founded, and the Chair of Natural History became the Chair of Zoology.

UNIVERSITY BUILDINGS.

The changes in the City of Glasgow having so entirely altered the character of the district in which the University Buildings were planted in the fifteenth century as to render the locality altogether unsuitable for an Academic Institution; and the buildings themselves having become, by their limited extent and defective construction, inadequate for the modern requirements of a great educational establishment; measures were adopted for the removal of the University to more extended and commodious buildings, and for this purpose a large extent of ground was secured in the lands of Gilmorehill, in the western part of the City.

In 1846, a Bill for the sale of the College grounds and buildings to the Monklands Junction Railway Company, and the transference of the University to a new site on Woodlands, was passed by both Houses of Parliament, and received the Royal assent. But that measure failed by the inability of the Railway Company to implement their engagements; and the Senate of the University found no favourable opportunity for the renewal of the scheme, till the year 1863, when a proposal

¹ See Dr. Thomas Reid's Account of the University of Glasgow.

for the purchase of the College lands and buildings was made by the City of Glasgow Union Railway Company, and a sale was accordingly effected to that Company, under their Act of Parliament, in 1864, at the price of £100,000.

The funds at the disposal of the University to carry out the scheme of removal consisted of—(1.) The produce of the sale of the old College and grounds, £100,000,—(2.) A sum of £17,500, consisting of the principal sum of £10,000, obtained by the University as compensation from the Monklands Junction Company, for non-fulfilment of their agreement, with interest since the time of payment, and—(3.) A sum of £21,400, promised by her Majesty's Government in aid of the scheme of removal, conditionally on a further sum of £24,000 being raised by public subscription, for the erection of a sick hospital in connection with the new University Buildings.

With these funds at their disposal, buildings might have been erected sufficient for the transaction of the ordinary business of instruction in the same manner as heretofore, and for the accommodation of the Library and Museum, but they must have been of the plainest design, and on a scale quite inadequate to provide for the future extension of the University.

In these circumstances, the Senate resolved to make an earnest appeal for aid to the Government and to the public. This appeal was responded to in the most generous and gratifying manner. In a short time a sum of nearly £100,000 was subscribed, chiefly in the City of Glasgow; and the Government, appreciating the importance of the work, and the public interest it had excited, announced their intention to ask Parliament for the sum of £120,000, in six annual instalments, on condition of a like amount being raised by subscription and expended on the buildings. This sum was paid out of the National Treasury, and there has been received from the public subscription for the University Buildings and the Western Infirmary and from legacies the large amount of £261,429, including £45,000 from the late Marquis of Bute for the erection of the Bute Hall, £5,000 from the late Dr. J. M'Intyre for the University Union Buildings, £5,000 from the Bellahouston Trustees for Medical Buildings in the Women's department, £4,274 from the late Sir William Pearce, Bart., for the removal of the old College front and the re-erection of the materials at

the north-east gateway, £5,000 bequeathed by Mr. Andrew Cunninghame, and £1,000 (less legacy duty) bequeathed by Mr. James Marshall for the completion of the tower, and special subscriptions amounting to £2,600 for building and furnishing the Gymnasium. A sum of £30,000 was allocated to the Western Infirmary. New buildings, designed by the late Sir G. Gilbert Scott, were erected on the grounds of Gilmorehill; and in these buildings the classes of the University met for the first time in session 1870-71. In 1893 the buildings and grounds were extended by the gift of North Park House and Grounds for the use of the women students of the University. Extensive additions to the buildings at Gilmorehill have recently been made, including Engineering Lecture-rooms and Laboratory, Botany Class-rooms, Museum and Herbarium, and an extension of the Anatomical Department. The cost of these additions has been defrayed from the Randolph Bequest and from funds provided by the Bellahouston Trustees, the Trustees of the late James B. Thomson, and other benefactors. Two other groups of buildings are now (1906) nearly completed, funds being provided by the Carnegie Trust and by the Principal's University Equipment Scheme. The one group is for the accommodation of Natural Philosophy, and the other for Physiology, Materia Medica, and Forensic Medicine. A temporary building has also been erected for increasing the accommodation of the Chemical Department.

GOVERNMENT OF THE UNIVERSITY.

Previous to the Universities Act of 1858 the whole business of the University was transacted in three distinct courts—namely, the Senate, the Faculty, and the Comitia.

The *Senate* consisted of the Rector, the Dean, the Principal, and all the Professors of the University. Meetings of the Senate were held for conferring degrees, and for the management of the libraries and other matters belonging to the University.

The *Faculty*, or College Meeting, consisted of the Principal, who presided, and the Professors of Divinity, Church History, Oriental Languages, Natural Philosophy, Moral Philosophy, Mathematics, Logic, Greek, Humanity, Civil Law, Medicine, Anatomy and Practical Astronomy. The Members of Faculty had the administration of the whole revenue and property of the College, along with the right of exercising the patronage of eight pro-

fessorships vested in the College. They also presented a Minister to the parish of Govan, and had the gift of various bursaries.

The Constituent Members of the *Comitia* were the Rector, the Dean, the Principal, the Professors, and the Matriculated Students of the University. The Rector or Vice-Rector presided in this Court, and also in the Senate. Meetings of the *Comitia* were held for the election and admission of the Rector, for hearing the inaugural discourses of the Principals and Professors previously to their admission to their respective offices, and for promulgating the laws of the University.

Besides these a court, called the *Jurisdictio Ordinaria*, consisting of the Principal, the four Regents (viz., the Professors of Greek, Logic, Ethics, and Physics), and the Professor of Humanity, with the gowned students, met occasionally, for the exercise of discipline over the junior students.

By the Scottish Universities Act, 21 and 22 Vict., chap. 83, important changes were made in the constitution and government of the University. The distinction between the Faculty and the Senate was abolished; two new bodies, called the University Court and University Council, were instituted; and Commissioners were appointed, armed with extensive powers of revision and regulation, who issued ordinances, sanctioned by Her Majesty, for the administration of the affairs of the University.

Further changes were made by the Universities (Scotland) Act, 1889. A Committee of Her Majesty's Privy Council was constituted, styled the Scottish Universities Committee of the Privy Council. An Executive Commission was created with power to repeal or modify any ordinance made under the Act of 1858. The Commissioners continued to exercise their powers till the end of 1897 and issued ordinances, *inter alia*, for Degrees in Arts, Science, Medicine, Law, and Divinity, for the instruction and graduation of Women, and for special study and research. They also issued an ordinance (No. 60) laying down regulations for the constitution of the Students' Representative Council, and regulations under which that Council is entitled to petition the *Senatus Academicus* and the University Court.

CHANCELLOR.

The Chancellor is the head of the University, and, by himself or his deputy, has the privilege of conferring Academical Degrees upon persons found qualified by the Senate. All changes in the internal arrangements of the University must have the sanction of the Chancellor before being carried into effect. He is elected by the General Council, of which he is president. His office is held during life. He nominates an Assessor in the University Court, and he is empowered to appoint a Vice-Chancellor to discharge his office in his absence, so far as regards conferring Degrees, but in no other respect. The office of Vice-Chancellor has usually been, and is now, held by the Principal.

Chancellors from the year 1642.

- 1642. James Hamilton, Marquis of Hamilton.
- 1660. William Cunningham, Earl of Glencairn.
- 1661. Andrew Fairfowl, Archbishop of Glasgow.
- 1664. Alexander Burnett, " "
- 1670. Robert Leighton, " "
- 1674. Alexander Burnett, " "
- 1679. Arthur Ross, " "
- 1684. Alexander Cairncross, " "
- 1687. John Paterson, " "
- 1692. John Carmichael, Earl of Hyndford.
- 1714. James Graham, Duke of Montrose.
- 1743. William Graham, " "
- 1781. James Graham, " "
- 1837. James Graham, " "
- 1875. Sir William Stirling-Maxwell, Bart., M.P.
- 1878. Walter Francis, Duke of Buccleuch and Queensberry, K.G.
- 1884. John Hamilton Dalrymple, Earl of Stair, K.T.
- 1904. WILLIAM THOMSON, BARON KELVIN OF LARGS, G.C.V.O., O.M.

RECTOR.

The Rector is elected by the matriculated students of the University, divided into four nations.¹ In the case of an

¹ The nations are constituted as follows :—

1. The Natio Glottiana consists of all matriculated students born within the County of Lanark.

2. The Natio Transforthana consists of all matriculated students born within any of the Counties of Orkney and Shetland, Caithness, Sutherland, Ross, Inverness, Cromarty, Nairn, Moray, Banff, Aberdeen, Perth, Forfar, Kincardine, Clackmannan, Fife, Kinross, Argyle, Stirling, and Dumbarton.

3. The Natio Rothseiana consists of all matriculated students born within any of the Counties of Bute, Renfrew, and Ayr.

4. The Natio Loudoniana consists of all matriculated students not included in any of the other nations.

equality of nations the Chancellor had, in accordance with the Act of 1858, the casting vote, but under the Act of 1889 the Commissioners have ordained (Ord. No. 7) that the election shall be determined by the majority of votes of all the students voting whenever the votes of the nations shall be equally divided. The Universities Commission (1858) ordained that the election should take place upon the 15th November (the 16th, if the 15th fell on a Sunday); but by Ordinance No. 139 of the Universities Commission (1889), the election is to take place on such day in the month of October or November as may be fixed by the University Court after consultation with the Senate, but the date cannot be later than the second Saturday in November in any year. The term of office is three years. The Rector is the official President of the University Court.

Rectors from 1773.

- 1773. Charles Cathcart, Lord Cathcart.
- 1775. Lord Chief Baron Montgomerie.
- 1777. Andrew Stewart, Esq. of Torrance.
- 1779. James Maitland, seventh Earl of Lauderdale.
- 1781. Right Hon. Henry Dundas.
- 1783. Right Hon. Edmund Burke.
- 1785. Robert Graham, Esq. of Gartmore.
- 1787. Adam Smith, LL.D.
- 1789. Walter Campbell, Esq. of Shawfield.
- 1791. Thomas Kennedy, Esq. of Dunure.
- 1793. William Mure, Esq. of Caldwell.
- 1795. William M'Dowall, Esq. of Garthland.
- 1797. George Oswald, Esq. of Auchincruive.
- 1799. Right Hon. Sir Ilay Campbell, Lord President.
- 1801. William Craig, a Lord of Session.
- 1803. Lord Chief Baron Dundas.
- 1805. Henry Glassford, Esq. of Dugalston.
- 1807. Archibald Colquhoun, Esq. of Killermont.
- 1809. Archibald Campbell, Esq. of Blythswood.
- 1811. Lord Archibald Hamilton.
- 1813. Thomas Graham, Lord Lynedoch.
- 1815. David Boyle, Lord Justice Clerk.
- 1817. George Boyle, Earl of Glasgow.
- 1819. Kirkman Finlay, Esq., M.P.
- 1820. Francis Jeffrey, Esq., Advocate.
- 1822. Sir James Mackintosh, M.P.
- 1824. Henry Brougham, Esq., M.P.
- 1826. Thomas Campbell, LL.D.
- 1829. Henry Petty, Marquis of Lansdowne.

- 1831. Henry Cockburn, Esq., Solicitor-General.
- 1834. Lord Stanley, M.P.
- 1836. Sir Robert Peel, Bart., M.P.
- 1838. Sir J. G. R. Graham, Bart., M.P.
- 1840. John Campbell, Marquis of Breadalbane.
- 1842. Right Hon. Fox Maule, M.P.
- 1844. Andrew Rutherford, Esq.
- 1846. Lord John Russell.
- 1847. Colonel Mure of Caldwell.
- 1848. Thomas Babington Macaulay, Esq.
- 1850. Archibald Alison, Esq., Sheriff of Lanarkshire.
- 1852. Earl of Eglinton.
- 1854. Duke of Argyle.
- 1856. Sir Edward Bulwer Lytton.
- 1859. Earl of Elgin.
- 1862. Viscount Palmerston.
- 1865. John Inglis, Lord Justice Clerk.
- 1868. Lord Stanley (afterwards Earl of Derby).
- 1871. Right Hon. Benjamin Disraeli, M.P. (Earl of Beaconsfield).
- 1877. Right Hon. William Ewart Gladstone, M.P.
- 1880. Right Hon. John Bright, M.P.
- 1883. Right Hon. Henry Fawcett, M.P.
- 1884. Edmund Law Lushington, LL.D., D.C.L.
- 1887. Right Hon. Earl of Lytton, G.C.B., G.C.S.I., C.I.E.
- 1890. Right Hon. Arthur James Balfour, M.P.
- 1893. Right Hon. Sir John Eldon Gorst, M.P.
- 1896. Right Hon. Joseph Chamberlain, M.P.
- 1899. Right Hon. Earl of Rosebery, K.G., D.C.L., LL.D.
- 1902. Right Hon. George Wyndham, M.P.
- 1905. RIGHT HON. HERBERT H. ASQUITH, M.P.

DEAN OF FACULTIES.

From the beginning there has been in the University an officer of dignity with the title of Dean of Faculty or Dean of Faculties. The duties of the office, as originally constituted, were to exercise a superintendence over the studies, and, in conjunction with the Masters, to judge of the qualifications of applicants for degrees. From the year 1772 it was the duty of the Dean, in concert with the Rector and the Minister of Glasgow, to examine the accounts of the administration of the Revenue, and to give advice to the Principal and Professors, when it was necessary for them to institute a judicial inquiry

into the conduct of any of their number. By the Universities Act of 1858 the Dean of Faculties was a member of the University Court, but in the enumeration of the constituent members of the new University Court in the Act of 1889 the name does not occur. The election is made annually by the Senate at the close of the winter session.

Deans from the year 1800.

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| 1800. James Couper, D.D. | 1843. Sir T. Makdougall Brisbane, Bart. |
| 1802. Archd. Campbell, Esq. of Succoth. | 1845. A. Maconochie, Lord Meadowbank. |
| 1804. Gavin Gibb, D.D. | 1847. Earl of Eglinton. |
| 1806. Duncan Macfarlan, D.D. | 1849. Colonel Mure of Caldwell, M.P. |
| 1808. Gavin Gibb, D.D. | 1851. W. Lockhart, Esq., M.P. |
| 1810. Duncan Macfarlan, D.D. | 1853. Colonel Mure. |
| 1812. Gavin Gibb, D.D. | 1854. W. Lockhart, Esq. |
| 1814. Stevenson Macgill, D.D. | 1857. W. Stirling, Esq., of Keir, M.P. |
| 1815. Archibald Campbell, Esq., M.P. | 1860. J. Moncreiff, Lord Advocate. |
| 1817. Sir John Connel. | 1863. Sir A. I. Campbell of Succoth. |
| 1819. Archibald Campbell, Esq., M.P. | 1865. Henry Glassford Bell, Esq. |
| 1821. Sir John Connel. | 1868. Sir James Fergusson, Bart. |
| 1823. Archibald Campbell, Esq., M.P. | 1869. Sir Thos. E. Colebrooke, Bart., M.P. |
| 1825. Sir John Connel. | 1872. Archd. Orr Ewing, Esq., M.P. |
| 1827. Archibald Campbell, Esq., M.P. | 1876. Alexander B. M'Grigor, LL.D. |
| 1829. Sir John Connel. | 1879. James King, Esq. |
| 1831. Archibald Campbell, Esq. | 1882. R. W. Cochran-Patrick, LL.D., M.P. |
| 1833. Sir A. Campbell, Bart. | 1885. Alexander Crum, Esq., M.P. |
| 1835. Archibald Campbell, Esq. | 1888. Robert Berry, LL.D. |
| 1837. Sir A. Campbell, Bart. | 1896. W. P. Dickson, D.D., LL.D. |
| 1839. Kirkman Finlay, Esq. | 1901. The Rt. Hon. Lord Kelvin, G.C.V.O. |
| 1841. Lord Dunfermline. | 1904. SIR JAMES KING, BART., LL.D. |

PRINCIPAL.

The office of Principal or Principal Regent of the College was almost coeval with the foundation of the University, and was regulated anew by James VI., in 1577. It is in the appointment of the Crown. The Principal is President of the Senatus Academicus; and is also, *ex officio*, a member of the University Court.

Principals from the year 1574.

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|----------------------------|-----------------------------|
| 1574. Andrew Melville. | 1690. William Dunlop. |
| 1580. Thomas Smeaton. | 1701. John Stirling. |
| 1586. Patrick Sharpe. | 1728. Neil Campbell. |
| 1615. Robert Boyd. | 1761. Wm. Leechman, D.D. |
| 1622. John Cameron, D.D. | 1786. Archd. Davidson, D.D. |
| 1626. John Strang, D.D. | 1803. William Taylor, D.D. |
| 1650. Robert Ramsay. | 1823. Duncan M'Farlan, D.D. |
| 1653. Patrick Gillespie. | 1858. Thomas Barclay, D.D. |
| 1661. Robert Baillie, D.D. | 1873. John Caird, D.D. |
| 1662. Edward Wright. | 1898. ROBERT HERBERT STORY, |
| 1684. James Fall. | D.D., LL.D. |

UNIVERSITY COURT.

The University Court consists of (a) the Rector, (b) the Principal, (c) the Lord Provost of Glasgow for the time being, (d) an Assessor nominated by the Chancellor, (e) an Assessor nominated by the Rector, (f) an Assessor nominated by the Lord Provost, Magistrates, and Town Council of Glasgow, (g) four Assessors elected by the General Council, (h) four Assessors elected by the Senatus Academicus. There is a further provision in the Act of 1889 for the representation of affiliated Colleges.

Assessors since the University Court was constituted.

CHANCELLOR.

- 1859. John Robertson, D.D., Glasgow.
- 1865. A. Sym, D.D., New Kilpatrick.
- 1870. James Pearson, D.D., Strathblane.
- 1874. Robert Jamieson, D.D., Glasgow.
- 1878. J. A. Campbell, LL.D., Stracathro.
- 1887. Sir James King, Bart., LL.D.
- 1904. HENRY E. GORDON, B.A., OF AIKENHEAD.

RECTOR.

- 1860. Thomas Buchanan, Esq.
- 1863. Walter Buchanan, Esq., M.P.
- 1866. Archibald Orr Ewing, Esq.
- 1869. James A. Campbell, LL.D.
- 1878. Alexander Crum, Esq.
- 1880. Charles Cameron, M.D., LL.D., M.P.
- 1884. A. B. M'Grigor, LL.D.
- 1887. James Grahame, Esq.
- 1890. Lord Blythswood, LL.D.
- 1893. Matthew P. Fraser, LL.B.
- 1896. David Murray, LL.D.
- 1899. Alexander Ure, LL.B., M.P., Q.C.
- 1902. Allan F. Baird, Esq.
- 1905. WILLIAM LORIMER, Esq.

LORD PROVOST, MAGISTRATES, AND TOWN COUNCIL OF GLASGOW.

- 1889. James Colquhoun, LL.D.
- 1899. Robert M. Mitchell, Esq.
- 1906. ALEXANDER MURRAY, Esq.

GENERAL COUNCIL.

- 1859. Andrew Bannatyne, LL.D.
- 1864. Lord Kinloch.
- 1867. Anderson Kirkwood, LL.D.

1887. R. W. Cochran-Patrick, LL.D.
 1889. David Hannay, Esq.
 1889. Hector C. Cameron, M.D.
 1889. Sir John Neilson Cuthbertson.
 1891. Rev. J. W. King, M.A., D.D.
 1891. D. C. M'Vail, M.B.
 1893. Hector C. Cameron, M.D.
 1893. Sir John Neilson Cuthbertson.
 1895. Rev. J. W. King, D.D.
 1895. D. C. M'Vail, M.B.
 1897. Hector C. Cameron, M.D.
 1897. Sir John Neilson Cuthbertson, LL.D.
 1899. D. C. M'Vail, M.B.
 1899. Sir James Bell, Bart.
 1900. William Robertson Copland, Esq.
 1901. Sir John Neilson Cuthbertson, LL.D.
 1901. William Robertson Copland, Esq.
 1903. D. C. M'VAIL, M.B.
 1903. DAVID MURRAY, LL.D.
 1905. John Hutchison, LL.D.
 1905. WILLIAM ROBERTSON COPLAND, C.E.
 1905. JOHN HUTCHISON, LL.D.

SENATUS ACADEMICUS.

- 15th Nov., 1859. Professor W. Ramsay, M.A.
 11th Dec., 1863. Professor R. Buchanan, LL.D.
 12th Dec., 1867. Professor Allen Thomson, M.D.
 11th Jan., 1872. Professor Sir W. Thomson.
 13th Jan., 1876. Professor Cowan, M.D.
 29th Jan., 1880. Professor Berry, M.A., LL.D.
 31st Jan., 1884. Professor Dickson, D.D., LL.D.
 9th Feb., 1888. Professor G. G. Ramsay, LL.D.
 28th Nov., 1889. Professor Leishman, M.D.
 28th Nov., 1889. Sheriff Berry, LL.D.
 28th Nov., 1889. Professor Stewart, D.D.
 28th Nov., 1890. Professor Ramsay, LL.D.
 30th Nov., 1891. Professor Leishman, M.D.
 28th Nov., 1892. Sheriff Berry, LL.D.
 28th Nov., 1893. Professor Stewart, D.D.
 30th Nov., 1893. Professor Gairdner, M.D., LL.D.
 28th Nov., 1894. Professor Jack, LL.D.
 30th Nov., 1895. Sir W. T. Gairdner, K.C.B., M.D., LL.D.
 28th Nov., 1896. Sheriff Berry, LL.D.
 28th Nov., 1897. Professor Stewart, D.D.
 28th Nov., 1898. Professor Adamson, LL.D.
 30th Nov., 1899. Professor Young, M.D.

28th Nov., 1900.	Professor Moir, LL.D.
28th Nov., 1901.	Professor Stewart, D.D.
6th Mar., 1902.	Professor Raleigh, M.A.
28th Nov., 1902.	Professor Raleigh, M.A.
15th Jan., 1903.	Professor Muir, M.A., M.D.
30th Nov., 1903.	PROFESSOR MUIR, M.A., M.D.
13th Oct., 1904.	PROFESSOR JONES, LL.D., Litt.D., F.B.A.
28th Nov., 1904.	PROFESSOR GRAY, LL.D.
28th Nov., 1905.	PROFESSOR STEWART, D.D.

The Rector's Assessor continues in office three years, and the other Assessors four years.

Under the Universities Act, 1858, the Court has power :

1. To review all decisions of the Senate, and to be a Court of Appeal from the Senatus, except as otherwise provided in the Universities Act.

2. To effect improvements in the internal arrangements of the University, after due communication with the Senate, and with the sanction of the Chancellor : provided that all such proposed improvements be submitted to the General Council for consideration.

3. To require due attention on the part of the Professors to the Regulations as to the mode of teaching and other duties imposed on the Professors.

4. To fix and regulate, from time to time, the fees in the several Classes.

5. Upon sufficient cause shown, and after due investigation, to censure any member of Senate, or to suspend him from office, and from the emoluments thereof, in whole or in part, for any period not exceeding one year, or to require him to retire on a retiring allowance, or to deprive him of office ; and during the suspension of any Professor, to make provision for the teaching of his class : provided always, that no such sentence of censure, deprivation, etc. shall have effect until approved by His Majesty in Council.

By Section 19 any of the Rules and Ordinances enacted by the Universities Commissioners under the Act, may be altered or revoked by the University Court of the University to which they are applicable, but only with the written consent of the Chancellor, and with the approval of His Majesty in Council.

By the Universities (Scotland) Act, 1889, the University Court is a body corporate with perpetual succession and a common seal ; and all the property belonging to the University at the passing of the Act is now vested in that body.

By the same Act, the University Court, in addition to the powers conferred upon it by the Act of 1858, has power :

1. To administer the whole revenue and property of the University, including share of annual Government Grant, and bursary and other mortifications.

2. To review any decision of the Senate, appealed against by a member of Senate or other member of the University interested,¹ and to receive representations and reports from the Senate and the General Council.

3. To review on representation by any member of the University Court or by any member of Senate, any decision of the Senate in the exercise of its

¹ An appeal against any decision of the Senate must be lodged with the Secretary of the University Court within fourteen days from the date of the issue of such decision. See Ordinance No. 5.

powers of regulating and superintending the teaching and discipline of the University; but decisions in matters of discipline can be reviewed only on appeal by a member of Senate or by a member of the University directly affected.

4. To appoint professors to chairs in University patronage; to appoint examiners and lecturers; and to recognise for graduation purposes the teaching of any college or individual teacher, under any regulations laid down by the Commissioners, which regulations, after the expiration of the powers of the Commissioners, may from time to time be modified or altered by the Universities Committee.

5. To define on application by any member of the Senate the nature and limits of a professor's duties under his commission, subject to appeal to the Universities Committee.¹

6. To take proceedings against a principal or professor, University lecturer, assistant, recognised teacher or examiner, or any other person employed in teaching or examining.

7. To appoint from persons not being members of Senate one third of the members of any standing committee or committees charged, by ordinance of the Commissioners, with superintendence of University libraries or museums, and to review any decision of the Senate regarding the recommendations of such committee or committees.

8. To appoint committees of its own number, consisting of not less than five members, to report on any business entrusted to them or to carry out special instructions.

9. To elect the representative of the University on the General Medical Council, under the Medical Act, 1886.

10. After the expiration of the powers of the Commission to found new professorships with the approval of the Universities Committee.² After such expiration no new professorship shall be founded otherwise.

By Section 21 of the Act of 1889 the University Court has power to make new ordinances, with the approval of His Majesty in Council:

1. With respect to the appropriation of the sum allotted to the University by the Commissioners out of the annual grant.

2. Altering or revoking any of the ordinances affecting the University which have been or may be framed and passed under the Act of 1858 or the Act of 1889, and making new ordinances: provided that such ordinances, before being submitted to His Majesty for approval, have been communicated by the University Court to the Senate, the General Council, and the University Courts of the other Universities, and have been laid for twelve weeks before both Houses of Parliament.

The Court is entrusted with the patronage of several of the Professorships, appoints the additional Examiners for Degrees, and is a court of final appeal in any dispute which may arise in

¹ Ordinance No. 144, which was issued on 29th March, 1895, and came into force immediately after the expiration of the powers of the Commissioners (1889), empowers the University Court at any time to revise and adjust the terms of the commission to be issued at the next vacancy of any chair, with regard to the number of lectures and the period of instruction.

² Ordinance No. 144 enjoins the University Court before proceeding to the foundation of any new Professorship, to ascertain that there are sufficient means for its endowment, and also to take into consideration the contingent claim which the Professor may have to a pension.

making up the Register of the General Council. Seven Members of the Court constitute a quorum. The Rector is President—in his absence, the Principal.

SENATUS ACADEMICUS.

The Senatus Academicus consists of the Principal and the whole of the Professors, and is entrusted with the regulation and superintendence of the teaching and discipline of the University. It appoints two-thirds of the members of any standing committee or committees charged by ordinance of the Commissioners with the immediate superintendence of University libraries or museums. It receives in the first instance all reports by such committee or committees, and, subject to the review of the University Court, it may confirm, modify, or reject the recommendations in such reports. The Senate continues to possess and exercise the powers possessed by it before the passing of the Act of 1889 so far as they are not modified or altered by that Act or by the Act of 1858. The Principal, as President, has a deliberative and a casting vote. One third of the Senate constitute a quorum.

FACULTIES.

The Universities Commissioners, by Ordinance No. 31, dated 5th June, 1893, as amended by the University Court Ordinance No. viii., dated 12th February, 1903, settled the constitution of the several Faculties in this University, as follows:—I. The Faculty of Arts consists of the Professors of the following subjects, viz., English Language and Literature, Humanity, Greek, Hebrew and Semitic Languages, Mathematics, Natural Philosophy, Logic and Rhetoric, Moral Philosophy, History, Political Economy.¹ II. The Faculty of Science consists of the Professors of the following subjects, viz., Mathematics, Natural Philosophy, Astronomy, Chemistry, Zoology, Geology, Botany, Anatomy, Physiology, Civil Engineering and Mechanics, Naval Architecture. III. The Faculty of Medicine consists of the Professors of the following subjects, viz., Chemistry, Zoology, Botany, Anatomy, Physiology, Pathology, Materia Medica, Medicine, Surgery, Midwifery, Forensic Medicine, Clinical Medicine, Clinical Surgery.

¹See Ordinance No. 149, Section i.

IV. The Faculty of Law consists of the Professors of the following subjects, viz., Law, Forensic Medicine, Conveyancing, Political Economy.¹ V. The Faculty of Divinity consists of the Professors of the following subjects, viz., Divinity, Divinity and Biblical Criticism, Ecclesiastical History, Hebrew and Semitic Languages. The University Court has power to transfer Chairs from one Faculty to another, and in the event of the foundation of new Chairs, to determine to which Faculty or Faculties such Chairs shall belong.

The Professors constituting each Faculty annually elect one of their number to be Dean of the Faculty.

LECTURERS.

By Ordinance No. 17² of the Universities Commission (1889), the University Court is empowered to appoint, after consultation with the Senatus, Lecturers, whose teaching shall (unless otherwise determined by the University Court) qualify for graduation. They are appointed for a period not exceeding five years, but may be re-appointed. University Assistants or Demonstrators are eligible for appointment as Lecturers and *vice versa*; and both offices may be held at the same time by the same person.

Ordinance No. 65 provides that the classes of University Lecturers shall be conducted at the seat of the University, *i.e.* in the city of Glasgow and the immediate neighbourhood thereof, that no classes conducted by Lecturers elsewhere shall qualify for graduation in any Faculty, and that University Lecturers shall be in all respects subject to the discipline of the Senatus Academicus and of the University Court.

BOARDS OF STUDIES.

By Ordinance No. 11 of the Universities Commission (1889), it is provided that the Senate shall institute Boards of Studies corresponding as nearly as may be to the departments of study for graduation in Arts. Each Board of Studies consists of the Principal, the Dean of the Faculty of Arts, and such other members of the Senate and Lecturers in the

¹ See Ordinance No. 149, Section i.

² This ordinance is printed at length in the University Calendar for 1893-94, at pp. 504, 505.

University as the Senate may from time to time select, a member of the Board being appointed Convener by the Senate. The functions of these Boards are defined in Ordinance No. 11, sections xviii. and xix.

Provision is made in Ordinance No. 42 for the institution of one or more Boards of Studies in each of the Faculties of Medicine and Science. In Medicine the constituent members of the Board or Boards are Professors in the Faculty of Medicine, together with such Professors in other Faculties whose subjects qualify for graduation in Medicine, and such Lecturers in the University as the Senate may from time to time select. The Board or Boards of Studies in Science are similarly constituted *mutatis mutandis*. The Dean of the Faculty of Medicine is Convener of each Board of Studies in Medicine; the Senate appoints the Convener of each Board of Studies in Science.

UNIVERSITY ASSISTANTS OR DEMONSTRATORS.

By Ordinance No. 17¹ of the Universities Commission (1889), the University Court is empowered to determine, after consultation with the Senatus, the number and grade of the Assistants, if any, to be assigned to each Professor. The appointments are made by the University Court on the recommendation of the Professors. The duties of each Assistant are defined by the Professor, with the approval of the Senate. The Assistants are recognized as Officers of the University, and are styled University Assistants or Demonstrators, as the University Court may determine.

The Arnott and Thomson Demonstratorship, founded in 1875, is attached to the Chair of Natural Philosophy; the Muirhead Demonstratorship, founded in 1877, to the Chair of Physiology; and the Baxter Demonstratorship in Geology, founded in 1889, to the Chair of Geology.

There is also an Assistantship to the Professor of Engineering, which was founded in 1876 by the bequest of Mrs. Black, widow of the Rev. Dr. Black, Barony Church, Glasgow, and designated, in memory of her father, the Young Assistantship. The appointment is made by the University Court in conjunction with the Professor of Engineering.

¹ See note on page 43.

EXAMINERS FOR DEGREES.

By Ordinance No. 13, Sections xiv.—xvi., of the Universities Commission (1889), the Examiners for graduation in Arts, Science, and Medicine respectively are the Professors whose subjects qualify for graduation, together with such Lecturers in the University and such additional Examiners, appointed by the University Court, as the Court may deem necessary. In the case of Medicine, the Court is required to make such provisions as will ensure that every candidate shall be examined in each subject by at least two Examiners, one of whom shall not be a Professor or Lecturer in the University.

By Ordinances No. 39, Section vii., and No. 40, Section vii., of the Universities Commission (1889), the Examiners for graduation in Law are the Professors and Lecturers whose subjects qualify for graduation, and additional Examiners appointed by the University Court.

By Ordinance No. 63, Section ii., of the Universities Commission (1889), the Examiners for graduation in Divinity are the Professors of or Lecturers on the subjects included in the examinations, and two additional Examiners appointed by the University Court.

GENERAL COUNCIL.

The General Council as constituted by the Scottish Universities Act, 1858 (21 and 22 Vict., chap. 83), by the Representation of the People (Scotland) Act, 1868 (31 and 32 Vict., chap. 84), and by the Universities Elections Amendment (Scotland) Act, 1881 (44 and 45 Vict., chap. 40), consists of the following *ex officio* Members, viz., the Chancellor, the Members of the University Court from and after their first election, and the Professors, and also of the following persons after registration, viz., all Masters of Arts of the University, and all persons on whom the University has, after examination, conferred the Degree of Doctor of Medicine, or Doctor of Science, or Bachelor of Divinity, or Bachelor of Laws, or Bachelor of Medicine, or Bachelor of Science, or any other Degree instituted since 13th July, 1868; and also all persons who, previous to the 2nd August, 1861, had, as matriculated students, given regular attendance on the course of study in this University for four

complete sessions, or such regular attendance for three complete sessions in this University, and regular attendance for one such complete session in any other Scottish University, the attendance for at least two of such sessions having been on the course of study in the Faculty of Arts.

Members of the Council must have their names enrolled in a book kept for the purpose by the Registrar. The Register of the Council is made up annually in the month of December, for the year following, and includes the names of all members entered on the Registration Book on or before the 30th day of November in each year. The Registration Fee, which is a payment for life, is 20s.

By section 16 of the Act 44 and 45 Vict., chap. 40, it is enacted that no person shall be allowed, after examination, to graduate at any of the Universities of Scotland until he shall have paid the Registration Fee; and it is further enacted that every person who has hitherto been, or who shall in the future become, *ex officio*, a member of the General Council of any of the Universities shall, on payment of the Registration Fee, be put and continued on the Register of Members of General Council of such University during his life, and shall be entitled to all the privileges of a Member of Council. The Act also provides that no person, subject to any legal incapacity, shall be entitled to vote at any parliamentary election, or exercise any other privilege as a member of the General Council.

The corrupt payment of any Registration Fee is punishable as bribery.

The Council meets twice every year—viz., on the last Wednesday of October, and the first Wednesday of April. In addition to these statutory meetings the Council may hold special meetings at the instance of the Chancellor, who shall convene such meetings on a requisition from a quorum of members, and the Council may adjourn any meeting, and may appoint committees to investigate into and report upon any matter remitted to them, or to carry out instructions given to them by the Council. The quorum of the General Council has been fixed by the Universities Commissioners at ten for every complete thousand or fraction of a thousand on the Register, so that for the present year seventy members are requisite to constitute a quorum, there being 6809 names on the Register, but this provision does not apply to the statutory half-yearly meetings. It is competent to the Council

to take into consideration all questions affecting the well-being and prosperity of the University, and to make representations from time to time to the University Court, who shall return to the Council their deliverances thereon. The annual reports as to the statistics of attendance and as to the finances of the University, made by the University Court to the Secretary for Scotland, are to be laid by him before the General Council. To it are also to be communicated all new ordinances, or changes of existing ordinances, which may be proposed by the University Court.

The Chancellor and four of the Assessors in the University Court are elected by the Council. The manner in which these officers are elected is regulated by Ordinance No. 9 of the Universities Commission (1889). The President of the Council is the Chancellor; whom failing, the Rector; whom failing, the Principal; whom failing, the Chancellor's Assessor; whom failing, the Rector's Assessor. In the absence of all these officials, a Chairman shall be elected by the meeting; but in the election of Assessors the members of Senate may not take part.

The General Councils of the Universities of Glasgow and Aberdeen jointly return a representative to Parliament. The Vice-Chancellor of Glasgow University is the returning officer.

Members of Parliament for the Universities of Glasgow and Aberdeen.

- 1868. Right Hon. James Moncrieff, LL.D., Lord Advocate.
- 1869. Right Hon. Edward S. Gordon, LL.D., Dean of the Faculty of Advocates.
- 1876. Right Hon. William Watson, LL.D., Lord Advocate.
- 1880. Right Hon. James Alexander Campbell, LL.D.
- 1906. SIR HENRY CRAIK, K.C.B., LL.D.

STUDENTS' REPRESENTATIVE COUNCIL.

The constitution and functions of the Students' Representative Council are regulated by Ordinance No. 60, the provisions of which are as follows:—

I. The Students' Representative Council in each University shall submit to the University Court for approval the regulations under which it has been formed or now exists, and these

regulations as approved, or with such alterations as may from time to time be approved by the University Court, shall form the constitution of the Students' Representative Council, and shall, subject to the provisions of this Ordinance, determine the functions thereof, and the mode of election thereto.

II. After the University Court has approved of the constitution of a Students' Representative Council in any University, alterations in the said constitution shall be of no effect unless and until they shall receive the approval of the University Court.

III. (1) The Students' Representative Council shall be entitled to petition the *Senatus Academicus* with regard to any matter affecting the teaching and discipline of the University, and the *Senatus Academicus* shall dispose of the matter of the petition, or shall, if so prayed, forward any such petition to the University Court, with such observations as it may think fit to make thereon.

(2) The Students' Representative Council shall be entitled to petition the University Court with regard to any matter affecting the students other than those falling under the immediately preceding sub-section.

(3) Nothing contained in this section shall be held to pre-judge any right of appeal which may be competent under section 6, sub-section 2, of the Universities Act, 1889, nor the powers and jurisdiction of the *Senatus Academicus* with regard to the teaching and discipline of the University.

The Council at present consists of representatives (both men and women) from the different Faculties in the University, and its aims are (1) to represent the Students in matters affecting their interests; (2) to afford a recognized means of communication between the Students and the University authorities; (3) to promote social and academic unity among the Students. A Union Committee appointed by the Council completed in Session 1889-90 the arrangements for opening the "Glasgow University Union." The Council has various Sub-Committees—an Inter-Universities Committee, a Magazine Committee, which conducts during the winter session the "Glasgow University Magazine" (published weekly), an Amusements Committee, a Lodgings Committee, and a Book Exchange Committee.

Presidents of the Students' Representative Council.

1885-86. R. M. Wenley, M.A.	1896-97. Hyam Goodman, M.A.
1886-87. Gavin Lambie, M.A.	1897-98. Arth. S. Middleton, M.A.
1887-88. C. E. Robertson, M.B., C.M.	1898-99. James M. Black, M.A.
1888-89. John H. Harley, M.A.	1899-1900. Ivy M'Kenzie, M.A., B.Sc.
1889-90. Robert Bell, M.B., C.M.	1900-1901. John Muir, B.Sc.
1890-91. William Newlands.	1901-2. E. R. Mitchell, M.A.
1891-92. John White, M.A.	1902-3. D. A. Dick.
1892-93. R. S. Horne, M.A.	1903-4. G. J. Spreull, LL.B.
1893-94. John H. Pagan, B.D.	1904-5. F. W. Saunders, B.D.
1894-95. W. M. R. Pringle, M.A.	1905-6. R. H. NAPIER, M.A.
1895-96. John S. Thomson, M.A.	

STUDENTS.

Number of Students in the several Faculties, Session 1905-1906 :—

MEN.

In Arts (including Summer Matriculation of 1905, 15), -	676
Science (including Summer Matriculation of 1905, 5), -	249
Theology, - - - - -	43
Medicine (including Summer Matriculation of 1905, 95), -	657
Law (including Summer Matriculation of 1905, 3), -	209
Arts and Medicine, - - - - -	6
Arts and Science, - - - - -	6
Science and Medicine, - - - - -	1
Arts and Law, - - - - -	1
Arts and Theology, - - - - -	2
Single class enrolment, - - - - -	31
	<hr/> 1881

WOMEN.

In Arts (including Summer Matriculation of 1905, 3), -	431
Science (including Summer Matriculation of 1905, 1), -	10
Medicine (including Summer Matriculation of 1905, 16), -	63
Arts and Medicine, - - - - -	2
Single class enrolment, - - - - -	6
	<hr/> 512
Total, - - - - -	<hr/> 2393

Ordinance No. 50 of the Universities Commission (1889) requires that each student shall pay a matriculation fee of One Guinea, at the commencement of each winter session, for the whole academical year then next ensuing; and any student desirous of attending a class or classes during a summer session, without having matriculated at the commencement of the immediately preceding winter session, shall in respect of such summer session pay a matriculation fee of half a guinea. Ordinance No. 147 contains the following regulation

with regard to matriculated students:—No person shall be deemed to be a matriculated student in any University or shall enjoy any of the privileges of a matriculated student unless, in addition to paying the matriculation fee, he is enrolled as a student in attendance in one or more classes in the University, and has paid the fees entitling him to such attendance: provided that nothing herein contained shall affect the right of the University Court to exact a fee in lieu of and not exceeding the matriculation fee from any candidate for any examination or for graduation, not being at the time a matriculated student, in addition to the fee payable for such examination or graduation. The University Court is empowered in special circumstances to permit persons who have not matriculated to attend any single class in any Faculty, on payment of an Entrance Fee of Five Shillings in addition to the authorized class fee, subject to the following provisions, viz. :—(1) That attendance on any class without payment of the matriculation fee shall not qualify for graduation in any Faculty, (2) that persons who have not paid the matriculation fee shall not be entitled to a certificate of attendance on any class, and (3) that payment of such entrance fee shall not confer any University privilege other than the right of attendance on such class. Men students matriculate at the University, and women students at Queen Margaret College, on and after 17th October. Matriculation closes on 9th November.

Students are entitled, after matriculation, to the privilege of admission to the University Library and to the Hunterian Museum; they are also entitled to vote for the Lord Rector. They are classified as students in Arts, Science, Medicine, Law, and Divinity, according to the nature of their studies; and they are likewise, for academical purposes, divided into Togati and Non-Togati—the students of the Humanity, Greek, Logic, Ethics, and Natural Philosophy classes being Togati or gown students, from being required to wear the ancient academical robe—a scarlet cloak.

Under the Non-Togati, or ungowned students, are comprehended all those who, having finished their course of instruction in Arts, are prosecuting their studies in the other Faculties, with a more immediate view to their intended professions; and it comprises also other persons resident in the city or its vicinity, who, though engaged in other avocations, are disposed to

cultivate literary pursuits, or to extend their acquaintance with some favourite branches of learning or science, by attending the lectures given at the University.

A distinction is also made between Public and Private students. The former are required to undergo examinations, and to read or perform exercises on the subjects treated of in the lectures,—and they only are allowed to reckon their sessions of study as a qualification for proceeding to degrees in the several Faculties.

By Ordinance No. 18¹ of the Universities Commission (1889) the University Court was empowered to admit women to graduation, and to provide for their instruction, either by admitting them to the ordinary classes, or by instituting separate classes for their instruction. Under this ordinance women were for the first time admitted as matriculated students of this University in Session 1892-93.

Medical students have access, for the usual attendance in the wards and on the Clinical Lectures, to the Royal Infirmary situated in the Eastern part of the city, and to the Western Infirmary in the immediate vicinity of the University. In the Royal Infirmary certain wards are appropriated to the clinical instruction of women.

UNIVERSITY CHAPEL.

The University Chapel is under the management of a Committee of Senate, of which the Principal is Convener.

Public Worship is celebrated on certain Sundays during the Winter Session at 2.30 P.M., in the Bute Hall. The services are conducted by graduates of this University and other clergymen of various denominations.

GYMNASIUM.

This building was erected by public subscription, and fitted according to the most improved models, under the superintendence of the late Mr. Maclaren of Oxford, at a total cost of £2600, and was opened for the first time in January, 1872.

Gymnastic, Physical Culture, Boxing, and Fencing classes are held during the session. Mr. James Hughes conducts the classes in Gymnastics and Fencing, and Mr. John Boyle is Instructor in Boxing. Gymnastic classes meet on three days a week, to be arranged, from 10 A.M. to 1 P.M., and from

¹ This ordinance is given in full in the *University Calendar* for 1892-93, pp. 504-506.

4.30 P.M. to 5.30 P.M. Each class meets three times a week, and students may join any class which is convenient for them.

Gentlemen not connected with the University are admitted to the use of the Gymnasium, and a special evening class is formed for their benefit, which meets on Mondays and Thursdays from 8 P.M. till 10 P.M. Students may join this class, if they wish.

Fees.—Gymnastics. *For all Students*: One month, 5s.; Two months, 8s. 6d.; Three months, 12s.; Six months, 20s. *For Non-Students*: the Quarter (*i.e.* twice a-week for three months), 15s.; whole season (seven months), 35s. Fencing and Boxing: 10s. for a course of twelve lessons. Special arrangements are made for the summer session.

The Oxford Silver Medal, presented annually by the late Mr. Maclaren, for competition among the students, is continued by the Gymnasium, and, at the competition in February, 1906, was gained by James W. Jones. For the Oxford Bronze Medal, open to non-students, there were no entries this year.

A Badge presented by the Ladies of the University is awarded to the runner-up in the medal competition; in 1906 it was gained by Herbert A. Stewart.

In 1899 Professor Ramsay presented to the Gymnasium a Silver Challenge Cup for annual competition among teams representing the four Nations into which students are divided in voting at the Rectorial elections. In the competition held in February, 1906, the winning team was Loudoniana, composed of the following members: J. L. Ewan (Captain), J. W. Jones, W. S. Owen, and W. J. Smith.

Gymnastic classes for members of Queen Margaret College are also arranged.

The Gymnasium is managed by a joint-committee of professors and students.

Hon. President, Professor G. G. Ramsay, LL.D.

Hon. Treasurer, Alan E. Clapperton, B.L., 91 West Regent Street, Glasgow.

Hon. Secretary, Adam Patrick, M.A., 7 Bute Mansions, Glasgow, W.

ARMY COMMISSIONS FOR UNIVERSITY CANDIDATES.

1. Graduates in Arts or in Science of this University, and students who have passed all the examinations for the Degree of M.A. or for the Degree of B.Sc., are eligible for Commissions

in the Cavalry and Infantry of the line. The limits of age are from 17 to 23.

2. Students of this University who have passed "the Examination of Candidates for the Army," are also eligible for Commissions. They are required to attend one class in each of the following three departments, viz.: (*a*) Latin or Greek; (*b*) Logic or Moral Philosophy or English Literature; (*c*) Mathematics or Natural Philosophy,—and to pass the examination on the M.A. standard in the three subjects in which they have attended classes. The limits of age in this case are from 17 to 22.

Candidates for Certificates of having passed the Examination for the Army must enter their names and pay the Fees at the Matriculation Office at the same times as Candidates for the M.A. Examinations. The Fee for the Examination is Two Guineas.

TRAINING FOR THE HOME CIVIL SERVICE, THE INDIAN CIVIL SERVICE, AND EASTERN CADETSHIPS.

The Senate desire to make known the facilities offered to the students of the University who wish to prepare for the open competition for these appointments while carrying on their studies for the M.A. or B.Sc. degree. The range of subjects and the scale of marks are well adapted to the course of study pursued by the student for the Honours degree in Arts. Intending candidates should in all cases read for Honours—in at least one group. The age limits allow ample time for a second Honours school—if thought advisable; and the combination of Classical Honours with those of any of the other departments—such as Mathematics and Natural Philosophy, History, English, Philosophy, Economic Science, or Modern Languages—would be extremely valuable for the purpose. Students of Mathematics may be more fitted to take up the scientific subjects—Physics, Chemistry, Botany, Zoology, Geology, etc. Suitable preparation for these will be found in the courses for the degree of B.Sc. in Pure Science, and it is believed that the regulations now in force will make these subjects specially valuable to students of this University. Some of the courses for the degrees in Law are also recommended to candidates.

The following table shows the subjects of examination, with the marks assigned to each, and also the classes in the University which are suitable in each case.

N.B.—*The regulations are liable to alteration from year to year.*

Subject of Examination. *Marks.*

Classes in the University.

Latin, not less than two subdivisions, of which one must be Translation :		
Translation, - - - - -	300	Latin : Honours.
Composition, - - - - -	300	Latin : Honours.
Literature, - - - - -	300	Latin : Honours.
Roman History, - - - - -	500	Latin : Honours ; Roman Law.
Roman Law, - - - - -	500	Roman Law.
Greek, not less than two subdivisions, of which one must be Translation :		
Translation, - - - - -	300	Greek : Honours.
Composition, - - - - -	300	Greek : Honours.
Literature, - - - - -	300	Greek : Honours.
Greek History, - - - - -	500	Greek : Honours.
Mathematics, - - - - -	1200	{ Mathematics : Intermediate and Advanced Honours. Natural Philosophy : Ordinary and Honours (both sections).
Advanced Mathematics, - - - - -	1200	
Natural Science, <i>i.e.</i> any number not exceeding four of the following :		
Chemistry, - - - - -	600	Chemistry and Chemical Laboratory.
Physics, - - - - -	600	{ Natural Philosophy : Ordinary ; and Physical Laboratory.
Geology, - - - - -	600	Geology and Geological Laboratory.
Botany, - - - - -	600	Botany and Botanical Laboratory.
Zoology, - - - - -	600	Zoology and Zoological Laboratory.
Animal Physiology, - - - - -	600	{ Physiology and Physiological Laboratory.
English Composition, - - - - -	500	English : Ordinary.
English Language and Literature, - - - - -	600	English : Ordinary and Honours.
English History, either or both sections may be taken :		
I. To A.D. 1485, - - - - -	400	{ History : Ordinary. Constitutional Law and History.
II. A.D. 1485 to 1848, - - - - -	400	
General Modern History (Special Period), - - - - -	500	History : Honours.
Logic and Psychology, - - - - -	600	Logic : Ordinary and Honours.
Moral and Metaphysical Philosophy, - - - - -	600	{ Moral Philosophy : Ordinary and Honours.
Political Economy and Economic History, - - - - -	600	{ Political Economy : Ordinary and Honours.
Political Science, ¹ - - - - -	500	Political Philosophy.
English Law, - - - - -	500	
French Language and Literature, - - - - -	600	French : Ordinary and Honours.
German " " " - - - - -	600	German : Ordinary and Honours.
Italian, " " " - - - - -	600	Italian : Ordinary and Honours.
Sanskrit " " " - - - - -	600	
Arabic " " " - - - - -	600	Arabic : Ordinary and Honours.

¹ Preparation for this subject may also be obtained in the Moral Philosophy (Honours) Class, in the Political Economy (Honours) Class, and in certain of the Law Classes.

“Candidates are at liberty to name any of these branches of knowledge, with the proviso that the maximum number of marks that can be obtained from the subjects chosen is limited to 6000. If this maximum is exceeded by a candidate's selection he will be required to indicate one of his subjects, the marks for which should, in his case, be reduced so as to bring his maximum marks within the prescribed limits.” The marks assigned in each branch will be subject to such deduction as the Civil Service Commissioners may deem necessary in order to secure that no credit be allowed for merely superficial knowledge. No deduction will be made in the subjects of English Composition and Mathematics, but a corresponding deduction will be made from the reduced maximum of the subject selected by the candidate whose total maximum exceeds the limit of 6000 marks.

Age Limits.

Home Civil Service. Clerkships : Class I.

Candidates must have attained the age of 22, and must not have attained the age of 24, on the first day of the examination.

Indian Civil Service.

Candidates must have attained the age of 22, and must not have attained the age of 24, on the first day of August of the year in which the examination is to be held.

Eastern Cadetships.

Candidates must have attained the age of 21, and must not have attained the age of 24, on the first of August in the year in which the examination is held.

N. B.—Students who propose to enter for this examination are strongly advised to determine at the beginning of their course what line of study they can best follow, and to acquaint their Professors or Lecturers with their plans. Full particulars with regard to the competition will be found in the publications of the Civil Service Commission, which may be consulted in the University Reading-Room.

On this subject the Senate has appointed a Committee consisting of Professors Jack, Jones, Smart, Phillimore, Gray, Medley, Bower, Latta, and Mr. J. M. Irvine—Professor Medley, convener and secretary. The members of this Committee will be glad to give any further information or advice.

II.—TABLE OF UNIVERSITY FEES.

I.—MATRICULATION FEES [Ord. No. 50, Sec. i.].

At the commencement of each Academical Year, which extends from 1st October to 30th September, and includes both Winter and Summer Sessions, ...	£1 1 0
At the commencement of each Summer Session, if the Student has not matriculated for the Academical Year then current,	0 10 6

II.—ENTRANCE FEES [Ord. No. 50, Sec. ii.].

On admission of persons who are not matriculated Students to any single class, <i>if permitted by the University Court in special circumstances</i> ,	0 5 0
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N.B.—Attendance under this Regulation does not qualify for Graduation, and no Certificate for such attendance is given. The Entrance Fee confers no University privileges other than the right of attendance above mentioned.

III.—ENROLMENT FEES [Ord. No. 12, Sec. v., Ord. No. 14, Sec. viii. 5, Ord. No. 23, Sec. vi., Ord. No. 134, Sec v.].

At the commencement of each year of attendance on the lectures of Extra-Academical Teachers in Glasgow, whose Lectures are recognised for Graduation in Medicine or Science,	1 1 0
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IV.—EXAMINATION FEES.

Preliminary Examinations in Arts, Science, or Medicine —[Ord. No. 13, Sec. xii.].	
On each entry for Examination,	0 10 6
Degree of Master of Arts (M.A.)—[Ord. No. 50, Sec. iii.].	
The Fee for this Degree is	5 5 0
Payable £1 1s. on entering for Examination in each subject till £5 5s. are paid.	
Degree of Bachelor of Science (B.Sc.)—[Ord. No. 50, Secs. iv.–vii.].	
The Fee for this Degree is	6 6 0
Payable £1 1s. on entering for Examination in each subject till £6 6s. are paid.	
Diploma in Education—	
On entering for Examination,	2 2 0
Certificate in Engineering Science—	
On entering for last subject of Examination,	1 1 0
Degree of Doctor of Letters (D.Litt.)—[Ord. No. 62, Sec. xv.].	
On lodging Thesis,	10 10 0
Degree of Doctor of Philosophy (D.Phil.)—[Ord. No. 62, Sec. xiv.].	
On lodging Thesis,	10 10 0
Degree of Doctor of Science (D.Sc.)—[Ord. No. 50, Secs. viii.–x.].	
On lodging Thesis,	10 10 0

III.—SEPARATE FACULTIES AND CLASSES.

The University Classes will meet as follows, daily, unless otherwise specified :—

WINTER SESSION 1906-7.

I.—ARTS.

THURSDAY, 18TH OCTOBER, 1906.

<i>Classes.</i>	<i>Hours.</i>	<i>Class Fees.</i>	
<i>Latin</i> ,	8 a.m. or 9 a.m. and 1 p.m.,	£4 4 ¹	} PROF. RAMSAY.
— <i>Honours</i> ,	1 p.m.,	3 3	
— <i>Prose</i> ,	1 p.m., Wed. or 11 a.m., Thurs.,	1 1	
<i>Greek</i> ,	8 a.m.,	4 4 ¹	} PROF. PHILLIMORE.
— <i>Honours</i> ,	12 noon,	3 3	
— <i>Prose</i> ,	12 noon, once weekly,	1 1	
<i>English</i> ,	11 a.m.,	4 4 ¹	} PROF. DIXON.
— <i>Second Session</i> ,	11 a.m. three days weekly,	2 2	
— <i>Honours</i> ,	12 noon,	3 3	
<i>British History, Honours</i> ,	10 a.m.,	3 3	} Mr. K. K. M. Leys.
<i>French</i> ,	11 a.m.,	4 4 ¹	
— <i>Honours</i> ,	12.15 p.m., three days weekly (see p. 75),	3 3	} M. Charles Martin.
<i>German</i> ,	10 a.m.,	4 4 ¹	
— <i>Honours</i>	12.15 p.m. Mon., Thurs., and alternate Wed.,	3 3	} Dr. George P. Thistlethwaite.
<i>Italian</i> ,	(see p. 77),	4 4 ¹	
— <i>Honours</i> ,	(see p. 77),	3 3	} Signor F. Agnoletti.
— <i>Elementary</i> ,	(see p. 77),	2 2	
<i>Hebrew, Junior</i> ,	10 a.m.,	3 3	} PROF. ROBERTSON and
— <i>Senior</i> ,	9 a.m.,	4 4 ¹	
— <i>Honours</i> ,	12 noon, Tu., Wed., Th.,	3 3	} Mr. T. H. Weir.
<i>Arabic or Syriac</i> ,	(see p. 145),	2 2	
<i>Celtic</i> ,	4 4 ¹	} Dr. Geo. Henderson.
<i>Logic and Metaphysics</i> ,	9 a.m.,	4 4 ¹	
— <i>Honours</i> ,	11 a.m.,	3 3	} PROF. LATTA.
<i>Moral Philosophy</i> ,	8 a.m.,	4 4 ¹	
— <i>Honours</i> ,	12 noon, Mon., Tu., Wed.,	3 3	} PROF. JONES.
<i>Political Philosophy</i> ,	{ 11 a.m. on Wed., 12 noon on Thur. and Fri.,	3 3	
<i>Political Economy</i> ,	2 p.m.,	4 4 ¹	} PROF. SMART.
— <i>Honours</i> ,	3 p.m.,	3 3	
<i>Education (Theory, History, and Art of)</i> , 4 p.m.,	4 4 ¹	} Mr. John Clark.
<i>Philosophy of Law</i> (see p. 136), 4.30 p.m., Mon., Wed., Fri. . . . .	. . . . .	3 3
<i>Mathematics</i> ,	9 a.m., or 12 noon	4 4 ¹	} PROF. JACK.
— <i>Honours (Intermed.)</i> , 10 a.m., or 11 a.m., . . . . .	. . . . .	4 4 ²
— <i>Honours (Advanced)</i> , 11 a.m., Mon., Wed., Fri., . . . . .	. . . . .	4 4 ²
<i>Natural Philosophy (Lectures)</i> , 9 a.m.,	4 4 ¹	} PROF. GRAY.
— (<i>Lectures and Practical Work</i>), [Hours to be arranged], . . . . .	. . . . .	6 6
— <i>Honours, Section A</i> , 1 p.m., Mon.; and 12 noon, Wed., Fri., . . . . .	. . . . .	4 4 ^{1 3}
— <i>Honours, Section B</i> , 12 noon, Mon., Tu., Th., . . . . .	. . . . .	4 4 ^{1 3}
— <i>Honours, Sections A. & B.</i> ,	5 5 ⁴	}
<i>Physical Laboratory</i> ,	10 a.m. to 4 p.m.,	6 6	
— (<i>Half Session</i>),	3 3	

¹ Fee for a Second or subsequent Session, £3 3s.

² Fee £3 3s. when a class in Mathematics has already been taken.

³ Fee for either Honours Course along with or after Ordinary Class, £3 3s.

⁴ Fee for both Sections along with or after the Ordinary Class, £4 4s.

<i>Classes.</i>	<i>Hours.</i>	<i>Class Fees.</i>	
<i>Astronomy, First,</i>	{ 3 p.m., Mon., Wed., and Fri., (see p. 91),	£2 2	} PROF. BECKER.
———— <i>Second,</i>	{ 3 p.m., Tues., Th., and Fri., (see p. 91),	2 2	
———— <i>First and Second in same Session.</i>		4 4 ¹	
<i>Chemistry,</i>	10 a.m.,	4 4 ¹	} PROF. FERGUSON.
<i>Chemical Laboratory,</i>	10 a.m. to 4 p.m.,	10 10	
———— (Half Session),		5 5	
<i>Zoology (Elementary),</i>	9 a.m.,	4 4 ¹	} PROF. KERR.
<i>Zoological Laboratory (Elementary),</i>	11 a.m. or 3 p.m.,	3 3	
<i>Zoology, Advanced (Jan.),</i>	9 a.m.,	3 3	
<i>Botany, Advanced,</i>	(see p. 106),	3 3 ²	} PROF. BOWER.
<i>Botanical Laboratory, Advanced (Jan.),</i>	(see p. 106),	3 3 ²	
<i>Botany (in Summer),</i>			
<i>Geology (Lectures and Practical),</i>	4.30 p.m.,	5 5	PROF. GREGORY.
<i>History,</i>	10 a.m.,	4 4 ¹	} PROF. MEDLEY.
———— <i>Honours,</i>	11 a.m., Mon., Wed., Fri.,	3 3	
<i>Constitutional Law and History,</i>	4.30 p.m.,	4 4 ¹	} Dr. W.S. M'Kechnie.
———— <i>Honours,</i>	1 p.m., Mon., Wed., Fri.,	3 3	
<i>Roman Law,</i>	5.30 p.m.,	4 4 ¹	} Mr. J. M. Irvine.
<i>History of Civil Law (Half Course),</i>	5.30 p.m. (see p. 134),	3 3	

II.—SCIENCE.⁶

THURSDAY, 18TH OCTOBER, 1906.

<i>Classes.</i>	<i>Hours.</i>	<i>Class Fees.</i>	
<i>Mathematics,</i>	9 a.m. or 12 noon,	£4 4 ¹	} PROF. JACK.
———— <i>Honours (Intermed.),</i>	10 a.m. or 11 a.m.,	4 4 ³	
———— <i>Honours (Advanced),</i>	11 a.m., Mon., Wed., Fri.,	4 4 ³	
<i>Natural Philosophy (Lectures),</i>	9 a.m.,	4 4 ¹	} PROF. GRAY.
———— (Lectures and Practical Work),	[Hours to be arranged],	6 6	
<i>Higher Mathematical A.,</i>	{ 1 p.m., Mon.; 12 noon, Wed., Fri.,	4 4 ¹⁴	
———— <i>B.,</i>	12 noon, Mon., Tu., Th.,	4 4 ¹⁴	} PROF. GRAY.
———— <i>A. and B.,</i>		5 5 ⁵	
<i>Physics for Public Health (Half Session),</i>		2 2	
<i>Physical Laboratory,</i>	10 a.m. to 4 p.m.,	6 6	} Dr. James Muir.
———— (Half Session),		3 3	
<i>Electricity,</i>	12 noon, Wed. and Fri.,	3 3	
<i>Astronomy, First,</i>	{ 3 p.m., Mon., Wed., and Fri. (see p. 91),	2 2	} PROF. BECKER.
———— <i>Second,</i>	{ 3 p.m., Tues., Th., and Fri. (see p. 91),	2 2	
———— <i>First and Second in same Session,</i>		4 4 ¹	
<i>Chemistry,</i>	10 a.m.,	4 4 ¹	} PROF. FERGUSON.
<i>Chemical Laboratory,</i>	10 a.m. to 4 p.m.,	10 10	
———— (Half Session),		5 5	
<i>Physical Chemistry,</i>	9 a.m., Mon., Wed., Fri.,	3 3 0	} Mr. F. Soddy.
———— <i>Practical Course,</i>		2 2 0 ⁷	
<i>Radio-activity,</i>	9 a.m., Wed., Fri. (see p. 94),	1 11 6	

¹ Fee for a second or subsequent session, £3 3s.² See third note on p. 61.³ Fee £3 3s. when a class in Mathematics has already been taken.⁴ Fee for either Higher Course along with or after the Ordinary Class, £3 3s.⁵ Fee for both Sections along with or after the Ordinary Class, £4 4s.⁶ Any Graduate in Science shall be allowed to enter any Laboratory Course within the curriculum of the degree which he has taken, on payment of half the ordinary fee for such course, provided that if the course be required for further graduation he shall pay the full fee.⁷ Free to students attending the Chemical Laboratory.

<i>Classes.</i>	<i>Hours.</i>	<i>Class Fees.</i>	
<i>Organic Chemistry (Elem.),</i>	(see p. 91), . . .	£1 1	Dr. Patterson.
<i>Metallurgical Chemistry,</i>	(see p. 92), . . .	1 1	Dr. Fawsitt.
<i>Anatomy, Junior,</i>	1 p.m., . . .	4 4 ¹	} PROF. CLELAND and Demonstrators.
<i>Senior,</i>	11 a.m., . . .	4 4 ¹	
<i>Practical Anatomy,</i>	9 a.m. to 4.45 p.m., . . .	3 3 ²	
<i>Physiology,</i>	12 noon, . . .	4 4 ¹	} PROF. M'KENDRICK and Muirhead Demonstrator.
<i>Practical Physiology (in Summer).</i>			
<i>Advanced</i> (see p. 113), . . .		4 4 ¹	
<i>Physiological Laboratory,</i>	10 a.m. to 4 p.m., . . .	10 10	} Dr. E. P. Cathcart.
<i>(Half Session),</i>		5 5	
<i>Physiological Chemistry,</i>		2 2	
<i>Zoology, Elementary,</i>	9 a.m., . . .	4 4 ¹	} PROF. KERR.
<i>Zoological Laboratory, Ele- mentary,</i>	11 a.m. or 3 p.m., . . .	3 3	
<i>Zoology, Advanced (Jan.),</i>	9 a.m., . . .	3 3	
<i>Botany, Advanced,</i>	(see p. 105), . . .	3 3 ²	} PROF. BOWER.
<i>Botanical Laboratory, Ad- vanced (Jan.),</i>	(see p. 105), . . .	3 3 ²	
<i>Geology (Public Health),</i>	4.30 p.m. . . .	3 3	} PROF. GREGORY.
<i>(Mining),</i>	4.30 p.m. . . .	3 3	
<i>(Agriculture),</i>	4.30 p.m. . . .	4 4 ¹	
<i>(Engineering),</i>	4.30 p.m. . . .	5 5	
<i>Geology and Mineralogy,</i>	4.30 p.m. . . .	5 5	
<i>(Advanced),</i>	5.30 p.m. . . .	5 5	} PROF. GLAISTER. PROF. GLAISTER and Assistant.
<i>Practical Geology,</i>	4.30 p.m. to 6.30 p.m. . . .	3 3 ⁴	
<i>Public Health,</i>	12 noon, 4 days weekly, . . .	4 4 ¹	
<i>Public Health Laboratory,</i>	10 a.m. to 4 p.m., . . .	12 12	} PROF. BARR, Lec- turers and Demon- strators.
<i>(Half Session),</i>		6 6	
<i>Engineering, Class I.,</i>	9 a.m., . . .	2 2	
<i>II.,</i>	10 a.m., Mon., Wed., Fri., . . .	2 2	} PROF. BARR, Lec- turers and Demon- strators.
<i>III.,</i>	(not in 1906-7).		
<i>IV.,</i>	9 a.m. daily, ex. Sat., . . .	4 4 ¹	
<i>Engineering Drawing, etc.,</i>	9 a.m. to 5 p.m. daily, . . .	4 4 ¹	
<i>Engineering Laboratory,</i>	9 a.m. to 5 p.m., . . .	10 10	
<i>(Second Session),</i>		5 5	} Mr. J. S. Nicholson.
<i>Engineering Laboratory, Me- chanical or Electrical,</i>	9 a.m. to 5 p.m., . . .	3 3	
<i>Electrical Engineering, Junior,</i>	8 a.m. Mon., Wed., Fri., . . .	2 2	
<i>Senior,</i>	8 a.m. Tues., Thur., Sat., . . .	2 2	} Mr. Charles Latham.
<i>Mining, Class I.,</i>	3 p.m., Mon., Wed., . . .	2 2	
<i>II.,</i>	3 p.m., Tues., Thurs., . . .	2 2	
<i>III.,</i>	3 p.m., Fri., . . .	1 1	
<i>(for Evening Classes, see p. 102).</i>			
<i>Mine Management, Class I.,</i>	7.30 p.m., Mon., . . .	1 1	} PROF. BILES.
<i>II.,</i>	7.30 p.m., Wed., . . .	1 1	
<i>Naval Architecture and Mar- ine Engineering, Junior,</i>	12 noon, Mon., Wed., Fri., . . .	3 3	
<i>Senior,</i>	11 a.m., Mon., Tu., Th., . . .	3 3	} PROF. BILES.
<i>Practical, Junior,</i>	2 to 5 p.m., Tu., Wed., . . .	3 3	
<i>Senior,</i>	2 to 5 p.m., Tu., Wed., . . .	3 3	

¹ Fee for a second or subsequent session, £3 3s.

² Students who have taken two winters and two summers of Practical Anatomy, as well as the Junior and Senior Lecture courses, may afterwards enrol in Practical Anatomy at £1 1s.

³ Students who have attended Lectures or Laboratory Classes in Botany and paid fees amounting to at least £13 13s., in respect of such classes, may afterwards enrol in any Lecture or Laboratory Class in Botany for £1 1s.

⁴ Fee for Students who have already attended the Geology Class in the University, £2 2s.

III.—MEDICINE.

THURSDAY, 18TH OCTOBER, 1906.

<i>Classes.</i>	<i>Hours.</i>	<i>Class Fees.</i>	
<i>Zoology, Elementary,</i>	9 a.m.,	£4 4 ¹	} PROF. KERR.
<i>Zoological Laboratory, Elementary,</i>	11 a.m. or 3 p.m.,	3 3	
<i>Chemistry,</i>	10 a.m.,	4 4 ¹	} PROF. FERGUSON.
<i>Chemical Laboratory,</i>	10 a.m. to 4 p.m.,	10 10	
(Half Session),		5 5	
<i>Organic Chemistry (Elem.),</i> (see p. 91),		1 1	Dr. Patterson.
<i>Anatomy, Junior,</i>	1 p.m.,	4 4 ¹	} PROF. CLELAND and
<i>Senior,</i>	11 a.m.,	4 4 ¹	
<i>Practical Anatomy,</i>	9 a.m. to 4.45 p.m.,	3 3 ²	} Demonstrators.
<i>Physiology,</i>	12 noon,	4 4 ¹	
<i>Physiological Laboratory,</i>	10 a.m. to 4 p.m.,	10 10	} PROF. M'KENDRICK and
(Half Session),		5 5	
<i>Physiological Chemistry,</i>		2 2	Dr. E. P. Cathcart.
<i>Materia Medica and Therap.,</i> 1 p.m.,		4 4 ¹	PROF. STOCKMAN.
<i>Pathology, Systematic,</i>	3 p.m.,	4 4 ¹	} PROF. MUIR.
Demonstrations only, Tues., Fri.,		1 1	
<i>Surgery,</i>	12 noon,	4 4 ¹	PROF. SIR WM. MACEWEN.
<i>Midwifery,</i>	2 p.m.,	4 4 ¹	PROF. M. CAMERON.
<i>Practice of Medicine,</i>	11 a.m.,	4 4 ¹	PROF. SIR T. M. ANDERSON.
<i>Clinical Medicine,</i>	9 a.m.,	3 3	} PROF. GEMMELL and PROF.
<i>Clinical Surgery,</i>	9.15 a.m.,	3 3	} SIR T. M. ANDERSON.
			} PROF. SIR H. C. CAMERON
			} and PROF. SIR WM. MACEWEN.
<i>Public Health,</i>	12 noon, four days weekly,	4 4 ¹	} PROFESSOR GLAISTER
<i>Public Health Laboratory,</i>	10 a.m. to 4 p.m.,	12 12	
(Half Session),		6 6	and Assistant.
<i>Ear,</i>	4 p.m., (see p. 126),	1 1	Dr. Thomas Barr.
<i>Throat and Nose,</i>	4 p.m., Th. (University),	1 1	J. Walker Downie, M.B.
	4 p.m., Tues. or Fri. (Western Infirmary),		

IV.—LAW.

THURSDAY, 18TH OCTOBER, 1906.

<i>Classes.</i>	<i>Hours.</i>	<i>Class Fees.</i>	
<i>Scots Law,</i>	8 a.m.,	£4 4 ¹	PROF. GLOAG.
<i>Civil Law,</i>	5.30 p.m.,	4 4 ¹	Mr. J. M. Irvine.
<i>Conveyancing,</i>	8 a.m.,	4 4 ¹	PROF. MOIR.
<i>Constitutional Law and History,</i>	4.20 p.m.,	4 4 ¹	} Dr. W. S. M'Kechnie.
(Half Course),		3 3	
<i>Mercantile Law,</i>	5.30 p.m.,	4 4 ¹	} Mr. William Shaw.
(Half Course),		3 3	
<i>Public International Law,</i>	5.30 p.m., Mon., Wed., Fri.,	3 3	} Mr. A. H. Charteris.
<i>International Private Law</i> (in Summer),			
<i>Jurisprudence, General or Comparative,</i>	4.30 p.m., Mon., Wed., Fri.,	3 3	} Mr. Jas. A. M'Callum.
<i>Political Economy,</i>	2 p.m.,	4 4 ¹	
<i>Forensic Medicine,</i>	9 a.m. (Jan.),	4 4 ¹	PROF. GLAISTER.

¹ Fee for a Second or subsequent Session £3 3s.

Students who have taken two winters and two summers of Practical Anatomy, as well as the Junior and Senior Lecture Courses, may afterwards enrol in Practical Anatomy at £1 1s.

V.—THEOLOGY.

THURSDAY, 18TH OCTOBER, 1906.

<i>Classes.</i>	<i>Hours.</i>	<i>Class Fees.</i>	
<i>Divinity, Senior,</i>	11 a.m.,	£3 3	} PROF. REID.
<i>Junior,</i>	12 noon,	3 3	
<i>Hebrew, Junior,</i>	10 a.m.,	3 3	} PROF. ROBERTSON and Mr. T. H. Weir.
<i>Senior,</i>	9 a.m. daily, and 12 noon, Tu., Wed., Th.,	3 3	
<i>Arabic or Syriac,</i>	(see p. 145),	2 2 ¹	} PROF. COOPER.
<i>Ecclesiastical History, Junior,</i>	11 a.m.,	3 3	
<i>Senior,</i>	12 noon,	3 3	} PROF. STEWART.
<i>Biblical Criticism,</i>	10 a.m.,	3 3	
<i>New Testament Greek,</i>	9 a.m., Mon., Wed., Fri.,	2 2	

SUMMER SESSION 1907.

I.—ARTS.

WEDNESDAY, 24TH APRIL, 1907.

<i>Classes.</i>	<i>Hours.</i>	<i>Class Fees.</i>	
<i>Natural Philosophy, Hon.,</i>	10 a.m.,	£2 2 ⁶	} PROF. GRAY.
<i>Physical Laboratory,</i>	10 a.m. to 4 p.m.,	4 4	
<i>Chemical Laboratory,</i>	10 a.m. to 4 p.m.,	5 5	} PROF. FERGUSON.
<i>Botany,</i>	8 a.m. (see p. 105),	4 4 ²	
<i>Botanical Laboratory,</i>	9 a.m. to 4 p.m.,	3 3 ³	} Dr. Lang.
<i>Latin,</i>	10 a.m.,	2 2	
<i>Greek,</i>	8 a.m.,	2 2	} Mr. R. G. Nisbet.
<i>Mathematics,</i>	9 a.m.,	2 2	
<i>Hebrew,</i>	9 a.m.,	2 2	} Mr. W. Rennie.
<i>Arabic,</i>	(see p. 145),	2 2	
			} Mr. D. K. Picken.
			} Mr. R. J. T. Bell.
			} Mr. T. H. Weir.
			} Mr. T. H. Weir.

II.—SCIENCE.⁵

WEDNESDAY, 24TH APRIL, 1907.

<i>Classes.</i>	<i>Hours.</i>	<i>Class Fees.</i>	
<i>Zoology, Advanced,</i>	9 a.m.,	£3 3	} PROF. KERR.
<i>Botany,</i>	8 a.m. (see p. 105),	4 4 ²	
<i>Botanical Laboratory,</i>	9 a.m. to 4 p.m.,	3 3 ³	} PROF. BOWER.
<i>Physical Laboratory,</i>	10 a.m. to 4 p.m.,	4 4	
<i>Chemical Laboratory,</i>	10 a.m. to 4 p.m.,	5 5	} PROF. GRAY.
<i>Organic Chemistry, Elem.,</i>	(see p. 91),	1 1	
<i>Adv.,</i>	(see p. 91),	3 3	} PROF. FERGUSON.
<i>Metallurgical Chemistry,</i>	(see p. 92),	1 1	
			} Dr. Patterson.
			} Dr. Fawsitt.
<i>Practical Anatomy,</i>	8 a.m. to 3 p.m.,	2 2 ⁴	} PROF. CLELAND and Demonstrators.
<i>Practical Physiology,</i>	12 noon (see p. 113),	3 3	
<i>Physiological Laboratory,</i>	10 a.m. to 4 p.m.,	5 5	} PROF. M'KENDRICK and Muirhead Demonstrator.
<i>Public Health Laboratory,</i>	(see p. 119),	6 6	
			PROF. GLAISTER.

¹ For students who are attending, or have attended, the Hebrew Class, the Fee is £1 1s.² Fee for a Second or subsequent Session, £3 3s.³ See third note on page 61.⁴ Students who have taken two winters and two summers of Practical Anatomy, as well as the Junior and Senior Lecture Courses, may afterwards enrol in Practical Anatomy at £1 1s.⁵ See sixth note on page 60.⁶ Qualifying half course in Honours, if complemented by attendance on latter half of Class A of Winter Session immediately preceding or succeeding, and if Student has attended Intermediate Honours Mathematics before entering Hon. Nat. Phil.

III.—MEDICINE.

WEDNESDAY, 24TH APRIL, 1907.

<i>Classes.</i>	<i>Hours.</i>	<i>Class Fees.</i>	
<i>Physics.</i>	11 a.m.,	£3 3	Mr. G. W. Walker.
<i>Practical Physics,</i>	9 a.m. to 11 a.m. or 1 p.m. to 3 p.m. (see p. 86),	2 2	} PROF. GRAY,
<i>Botany,</i>	8 a.m. (see p. 105),	4 4 ¹	
<i>Botanical Laboratory,</i>	9 a.m. to 4 p.m.,	3 3 ²	} PROF. BOWER.
<i>Clinical Medicine,</i>	9 a.m.,	2 2	
			{ PROF. GEMMELL and PROF. SIR T. M. ANDERSON.
<i>Clinical Surgery,</i>	9.15 a.m.,	2 2	
			{ PROF. SIR H. C. CAMERON and PROF. SIR WILLIAM MACEWEN.
<i>Chemical Laboratory,</i>	10 a.m. to 4 p.m.,	5 5	
<i>Organic Chemistry, Elem.,</i>	(see p. 91),	1 1	Dr. Patterson.
<i>Practical Anatomy,</i>	8 a.m. to 3 p.m.,	2 2 ³	{ PROF. CLELAND and Demonstrators.
<i>Embryology,</i>	11 a.m. (see p. 111),	2 2	
<i>Embryological Laboratory,</i>	9 a.m. to 3 p.m. (see p. 112),	3 3	} Dr. J. F. Gemmill.
<i>Practical Anatomy and Embryology,</i>	if taken together,	3 3	
<i>Practical Pharmacy,</i>	12 noon,	3 3	PROF. STOCKMAN.
<i>Practical Physiology,</i>	12 noon (see p. 113),	3 3	} PROF. M'KENDRICK and Muirhead Demonstrator.
<i>Physiological Laboratory,</i>	10 a.m. to 4 p.m.,	5 5	
<i>Medical Jurisprudence and Public Health,</i>	11 a.m.,	4 4 ¹	} PROF. GLAISTER.
<i>Public Health Laboratory,</i>	(see p. 119),	6 6	
<i>Practical Pathology,</i>	1 to 3 p.m. (see p. 116),	3 3	PROF. MUIR.
<i>Operative Surgery,</i>	{ 12 noon, with practical work at other hours as may be arranged,	3 3	PROF. SIR WM. MACEWEN.
<i>Diseases of Women,</i>	2 p.m., Tu., Th., Fri.,	2 2	PROF. M. CAMERON.
<i>Insanity,</i>	{ 12 noon, Wed. (University), 10 a.m. Sat. (Gartnavel),	2 2	L. R. Oswald, M.B.
<i>Ear,</i>	4 p.m., (see p. 126),	1 1	Dr. Thomas Barr.
<i>Throat and Nose,</i>	{ 4 p.m., Th. (University), 4 p.m., Tues. or Friday, (Western Infirmary),	1 1	J. Walker Downie, M.B.

IV.—LAW.

WEDNESDAY, 24TH APRIL, 1907.

<i>Classes.</i>	<i>Hours.</i>	<i>Class Fees.</i>	
<i>Evidence and Procedure,</i>	8.45 a.m.,	£3 3	Mr. R. Lamond.
<i>International Private Law,</i>	5.30 p.m.,	3 3	Mr. A. H. Charteris.

1 Fee for a Second or subsequent Session, £3 3s.

2 See third note on page 61.

3 Students who have taken two winters and two summers of Practical Anatomy, as well as the Junior and Senior Lecture courses, may afterwards enrol in Practical Anatomy at £1 1s.

4 After first Lecture, the Class will meet in divisions.

In addition to the University Courses, the following Hospitals and Dispensaries afford ample means for Practical Instruction in the various departments of Medicine and Surgery :—

WESTERN INFIRMARY.—This Hospital contains 416 beds for medical and surgical patients, including Wards for Skin Diseases, and two for diseases peculiar to females. *Physicians*—Prof. Sir Thomas M'Call Anderson, M.D.; James Finlayson, M.D., LL.D.; Prof. Samson Gemmell, M.D.; Prof. Ralph Stockman, M.D. *Honorary Consulting Physicians*—Gavin P. Tennent, M.D.; Sir William T. Gairdner, K.C.B., M.D., LL.D., F.R.S. *Physicians for Diseases of Women*—W. L. Reid, M.D.; Professor Murdoch Cameron, M.D. *Assistant Physicians*—John Alexander, M.D.; William G. Dun, M.D.; R. B. Ness, M.B.; William MacLennan, M.B., C.M. *Surgeons*—Professor Sir Hector C. Cameron, M.D.; Professor Sir William Macewen, M.D., LL.D., F.R.S.; J. C. Renton, M.D.; George T. Beatson, M.D., C.B.; T. K. Dalziel, M.B.; James H. Nicoll, M.B. *Honorary Consulting Surgeon*—Alexander Patterson, M.D. *Honorary Consulting Ophthalmic Surgeon*—T. Reid, M.D., LL.D. *Assistant Surgeons*—Duncan Macartney, M.D.; Robert Kennedy, M.A., D.Sc., M.D.; Alfred A. Young, M.A., M.B.; George Burnside Buchanan, B.A. (Cantab.), M.B., C.M. *Dispensary Physicians*—James Carslaw, M.A., M.B., C.M.; John M. Cowan, B.A., M.D., B.C.; John S. M'Kendrick, M.D.; Robert Fullarton, M.A., M.B., Ch.B.; James C. M'Clure, M.B., C.M.; Francis J. Charteris, M.B., Ch.B. *Extra Dispensary Physicians*—Alexander B. Sloan, M.D., Ch.B.; John Gracie, M.B., Ch.B.; Leonard Findlay, M.D.; John P. Duncan, B.Sc., M.B., Ch.B. *Dispensary Physicians for Diseases of Women*—J. M. Munro Kerr, M.B.; E. H. Lawrence Oliphant, M.D. *Dispensary Surgeons*—John Morton, M.B.; G. H. Edington, M.D.; Farquhar Macrae, M.B., C.M.; Alexander MacLennan, M.B., C.M.; Archibald Young, B.Sc., M.B., C.M.; M. Logan Taylor, M.B., Ch.B. *Extra Dispensary Surgeons*—W. W. Christie, M.D., C.M.; C. C. Cuthbert, M.A., M.D., Ch.B.; A. H. Edwards, M.B., C.M. *Extra Dispensary Physicians for Diseases of Women*—G. N. Turner, M.B.; S. J. Cameron, M.B., Ch.B. *Dispensary Surgeon for Diseases of the Ear*—Thomas Barr, M.D. *Dispensary Surgeon for Diseases of the Throat and Nose*—J. Walker Downie, M.B. *Surgeon Dentist*—W. D.

Woodburn, L.D.S. *Pathologist*—Professor Robert Muir, M.D. *Assistant Pathologists*—J. H. Teacher, M.D., and M. Logan Taylor, M.B., Ch.B. *Vaccinator*—John W. Nicol, M.B. *Medical Superintendent*—Donald J. Mackintosh, M.B., M.V.O. *Matron*—Miss Helen Gregory Smith. *Secretary and Treasurer*—Henry Johnston, 125 Buchanan Street. The hour of visit is 9 A.M. The Dispensary for Out-Patients is open daily at 2 P.M. Vaccination—Mondays and Thursdays at 12 noon. The station is recognized by the Local Government Board. Fee, £1 1s. It is recommended that when practicable students should attend the vaccination course during the winter session.

According to the present arrangement admission to the practice of this Infirmary is subject to the following regulations:—

1. No student shall be permitted to attend the Infirmary without a Ticket duly signed by the Superintendent.

2. The Fees payable shall be as follows:—

(a) Every Student shall pay a fee of £10 10s. for Hospital attendance, and this shall be kept quite separate from the Fees for Clinical Instruction.

(b) Every Student shall pay £3 3s. for each Winter Session and £2 2s. for each Summer Session of Clinical Instruction.

(c) Students who have completed their Clinical Course elsewhere shall be permitted to enter for a six months' course of the *Hospital only*, on payment of a fee of £2 2s.

(d) There shall be two Courses of Clinical instruction, the first extending from the beginning of November to April, and the second from the beginning of May to July.

(e) At the beginning of each Course the Student shall give intimation to the Superintendent of the Clinical Teacher whose course he wishes to attend, by filling up a form which will be supplied on application to the Superintendent.

3. The fees shall be paid to the Superintendent, who shall give each Student a Ticket of Admission to the Lectures of the Physicians or Surgeons he wishes to attend. He shall also hand to each of the Clinical Lecturers a list of the Students who have taken out Tickets for their respective Courses.

OUT-DOOR VISITATION.—Senior Students who have passed their Third Professional Examination are permitted to visit the sick poor in the Anderston district, under the supervision of certain Professors of the University and assistants.

GLASGOW ROYAL INFIRMARY.—Number of beds, 588. Special

wards are set aside for the treatment of Venereal Diseases, Diseases of Women, Diseases of the Throat and Nose, and special beds for Diseases of the Ear. *Physicians*—George S. Middleton, M.A., M.D.; John Lindsay Steven, M.D.; Thomas Kirkpatrick Monro, M.A., M.D.; James Watson Allan, M.B.; Walter K. Hunter M.D., D.Sc. *Surgeons*—John Barlow, M.D.; James Alexander Adams, M.D.; David Newman, M.D.; Quintin M'Lennan, M.B.; James Hogarth Pringle, M.B.; Henry Rutherford, M.A., M.B.; Peter Paterson, M.B. *Assistant Physicians*—John B. MacKenzie Anderson, M.A., M.B.; John W. Findlay, M.D.; David M'Crorie, L.R.C.P.; Hugh M'Laren, M.B.; Norman Macnair, B.Sc., M.D.; John Henderson, M.D. *Extra Assistant Physicians*—Campbell S. Marshall, M.D.; James Scott, M.A., M.B., Ch.B.; John Thomson MacLachlan, M.D. *Assistant Surgeons*—A. N. McGregor, M.D.; James Luke, M.B.; John Patrick, M.B.; A. G. Faulds, M.B.; John A. C. Macewen, B.Sc., M.B.; Thomas Kay, M.B. *Extra Assistant Surgeons*—James Battersby, F.R.C.S. (Eng.); Donald Duff, F.R.C.S. (Edin.); W. H. Steel, M.B., Ch.B. *Diseases of Women*—J. K. Kelly, M.D. *Consulting Surgeon for Diseases of the Eye*—A. Maitland Ramsay, M.D. *Diseases of the Throat and Nose*—John Macintyre, M.B. *Pathologist and Curator of Museum*—Charles Workman, M.D. *Anaesthetist*—A. Laurie Watson, M.A., M.B. The hour of visit is 9 A.M. The hours at the dispensary for out-patients are as follows:—*Diseases of the Ear*—James Kerr Love, M.D. 3.30 P.M., Tuesday and Friday. *Diseases of the Throat and Nose*—R. Fullerton, M.D. 11 A.M., Tuesday and Friday. *Diseases of the Eye*—J. Rowan, M.B.; and H. W. Thomson, M.D. 11 A.M., Monday, Wednesday, and Friday. *Diseases of the Skin*—Alexander Morton, M.A., M.D. 11 A.M., Monday, Wednesday, and Friday. *Gynaecologists*—G. Balfour Marshall, M.D.; Peter M'Bryde, M.B., C.M. 11.30 A.M., Tuesday, Thursday, and Saturday. *Diseases of the Teeth*—William Taylor, L.D.S. 3.30 P.M., Monday, Wednesday, and Saturday. *Vaccination*—Hugh H. Borland, M.B., D.P.H., 12 noon, Monday and Thursday. The station is recognised by the Local Government Board.

The Electric Pavilion contains all the most recent apparatus for the diagnosis and treatment of disease by Electricity. *Consulting Electrician*—John Macintyre, M.B. *Medical Electrician*—James R. Riddell, L.R.C.P. etc. *Assistant*

Medical Electricians—Samuel Capie, M.B.; Archibald Jubb, M.D.; Katharine M. Chapman, L.R.C.P. Ed. *Bacteriologist*—David M'Crorie, L.R.C.P. *Assistant Bacteriologist*—J. Archibald Campbell, L.R.C.P.S.

Fees, which include Hospital Practice and the Clinical Lectures, for one year £10 10s., six months £6 6s., three months £4 4s. The total fee is £21. Vaccination £1 1s. The whole Vaccination fee and two-thirds of these fees will be paid by the Carnegie Trust for students who fulfil the conditions of the Trust. *Superintendent*—J. Maxtone Thom, M.B., D.P.H. *Matron*—Mrs. Strong. *Secretary*—Henry Lamond, 93 West Regent Street.

EYE INFIRMARY, 174 Berkeley Street and 80 Charlotte Street.—Hour of Visit, 1 P.M. daily. Fee for six months, £1 1s.; for twelve months, £2 2s.

OPHTHALMIC INSTITUTION, 126 West Regent Street.—Hour of Visit, 2 P.M. Fee for a qualifying course, £1 1s.

INSANITY.—During the Summer Session Dr. Oswald gives in the University a Course of Lectures on Insanity at 12 noon on Wednesdays, and Clinical Instruction at the Glasgow Royal Asylum, Gartnavel, at 10 A.M. on Saturdays. Fee for the combined Course, £2 2s.

At Gartloch Asylum, Gartcosh, Senior Medical Students may obtain appointments as Resident Clinical Clerks. These appointments are made in April and October for six months. Board and lodging with railway fare to and from Glasgow are allowed, and Classes can be attended in Glasgow in the earlier part of the day. Application should be made to the Medical Superintendent, W. A. Parker, M.B., considerably in advance.

Clinical Instruction in Fevers is given at the Ruchill Hospital and the Belvidere Hospital. Fee for a course extending over ten weeks, once a week, £1 1s. Apply to Mr. James D. Borthwick, 285 George Street, Glasgow.

There are also Hospitals for Diseases of the Skin and Ear.

FACULTIES IN THE UNIVERSITY.

The whole classes of the University are arranged in five Faculties—Arts, Science, Medicine, Law, and Divinity.

I.—FACULTY OF ARTS.

The Faculty of Arts comprehends four Departments of study, viz.:—A. *Language and Literature*, embracing the classes of Humanity, Greek, English, French, German, Italian, Celtic, Hebrew and Semitic Languages; B. *Mental Philosophy*, comprising Logic and Metaphysics, Moral Philosophy, Political Economy, Education, Philosophy of Law; C. *Science*, including Mathematics, Natural Philosophy, Astronomy, Chemistry, Zoology, Botany, Geology; D. *History and Law*, containing History, Constitutional Law and History, Roman Law.

A. LANGUAGE AND LITERATURE.

I. HUMANITY.

The original foundation of this Professorship is not extant; but it appears from the records of the College that it must have been instituted previous to the year 1637. The Professor is elected by the University Court.

Professors from the year 1706.

1706. Andrew Rosse.	1773. Wm. Richardson, M.A.
1735. George Rosse.	1815. Josiah Walker, M.A.
1754. George Muirhead.	1831. William Ramsay, M.A.
1863. GEORGE G. RAMSAY, M.A., LL.D., Litt.D.	

The Humanity Class consists of two classes—the *Senior*, taught in two divisions, and the *Honours Class*, which latter class all members of the ordinary Senior Class have the option of attending. Students not requiring a Public Certificate for the Degree or other purpose may attend any class as Private Students. Private Students are students who attend the class without taking part in the class work.

In all the classes the students prepare certain work prescribed, and are examined orally every day. In the Honours Class the business is conducted partially by oral examination,

but mainly by Lectures and Prelections delivered by the Professor. *Unseens* are set from time to time, and Latin Verse Composition is taught to those that desire it.

Senior Class.

The SENIOR CLASS is taught in two divisions, one meeting daily at 8 A.M. and the other at 9 A.M. The divisions will be arranged, so far as possible, to suit the circumstances of students. All students attending the Senior Class have the option also of attending the Honours Class from 1 to 2 P.M. The subjects of study in the class at the morning hour are:—The works of Horace—Propertius—Virgil—Cicero—Sallust—Livy—Tacitus—Latin Prose Composition—Latin Prosody—Roman History and Antiquities. The students are examined on paper at intervals during the session. Latin Prose is taught in three sections, which meet at 1 P.M. on Wednesdays.

Honours Class, 1 P.M.

In this class advanced work is read. Special regard is paid to the needs of students preparing for the Honours Degree in Classics, as well as for Classical Scholarships, the Home and Indian Civil Service Examinations, etc.

One subject is usually read and lectured upon on Mondays and Fridays; another on Tuesdays and Thursdays; and Latin Prose is taught to the Honours Section at 11 A.M. on Thursdays. Students are allowed to attend as Private Students, *i.e.* as listeners only, without doing any of the work of the class; but in that case they do not receive tickets qualifying for the Degree.

Honour Students, wishing to do Latin Prose for the Degree or other purposes, may attend for Latin Prose only.

A course of five sessions may embrace Lectures and Prelections on Plautus—Terence—Lucretius—Catullus—Propertius—Virgil—Persius—Statius—Juvenal—Martial—Tacitus—Quintilian, Cicero's Oratorical and Philosophical works, etc.

The subjects read in the Session 1906-7 will be as follows:—

1. HONOURS CLASS, AT 1 P.M.—Juvenal; Persius; Tacitus, *Annals* XV.; Horace, *Epistles* II. and *Ars Poetica*; Virgil, *Bucolics* and *Æneid* VII.

2. SENIOR CLASS, AT 8 or 9 A.M.—Horace, *Odes*, at 8 and 9 A.M.; Cicero, *Pro Cluentio*, at 8 and 9 A.M.; Horace, *Satires II.*, at 8 and 9 A.M.; Ramsay's Latin Prose Composition, Vols. I. and II., Antiquities, and Prosody; How and Leigh's *History of Rome*.

II. GREEK.

This Professorship was founded by the College in or about the year 1581. The Professor is elected by the University Court.

Professors from the year 1704.

1704. A. Dunlop, LL.D.	1838. Edmund L. Lushington, LL.D.
1746. James Moor, LL.D.	1875. R. C. Jebb, D.C.L., Litt.D.,
1774. John Young, M.A.	LL.D.
1821. Sir Daniel K. Sandford, M.A.	1889. G. G. A. Murray, M.A., LL.D.
	1899. JOHN S. PHILLIMORE, M.A.

The Greek Class consists of two divisions, the Ordinary and the Honours. Students not requiring a Public Certificate may attend as Private Students, *i.e.* without doing the work of the class.

All students should possess the following books:—*Ancient Atlas*; *Greek Lexicon*, Liddell & Scott (large or intermediate edition—the small edition is not sufficient); some History or Primer of Greek Literature; *Greek Grammar*, Goodwin.

Senior students are recommended to get Gow's *Companion to the School Classics*, and Seyffert's *Dictionary of Classical Antiquities, etc.*, translated by Nettleship and Sandys; or, in place of Seyffert, Smith's two small volumes, the *Classical Dictionary* and the *Dictionary of Antiquities*.

ORDINARY CLASS.

This is the ordinary qualifying class for graduation; all members of it must have passed the Preliminary Examination in Greek on the higher standard, or an equivalent examination.

All students requiring a certificate of attendance must duly perform the work of the class; but those who do not require a certificate, or those who have not passed the Preliminary Examination, may attend as Private Students, *i.e.* without doing the work.

The class meets at 8 A.M. every week-day except Saturday.

The class hour is chiefly occupied by the Professor's lectures, but the class is liable to be examined orally or on paper every day. The work done includes the reading of Greek Authors; Greek Prose Composition; Written Exercises in translation; Greek History, Language, Antiquities, and Literature.

Women students have the option of attending this class.

HONOURS CLASS.

The Honours Class meets at 12 noon every week-day except Saturday. Members of the Ordinary Class are at liberty to attend; they are not recommended to attempt the work of the class except in so far as it suits their convenience. The Class consists of two divisions, viz.: First year's students (*i.e.* those who are seeking the certificate with a view to graduate with Honours, and doing the full work of the class), and Private students who have already been through the class. These may follow the class work, but arrangements will be made for more advanced teaching for them, either individually or in small voluntary groups.

The work is similar to that done in the Ordinary Class, but more advanced, greater attention being given to the History of Literature, Philology, Criticism, and Philosophy.

Subjects for Session 1906-7.

ORDINARY CLASS.—Homer, *Iliad* xxi. xxii.; Aeschines and Demosthenes, *De Falsa Legatione*. Greek Grammar and Literature; Written Translations and Prose Composition.

HONOURS CLASS.—For the lectures in this class the student should have read the books beforehand.

Subjects: Aeschylus, *Choephori*; Sophocles, *Electra*; Euripides, *Electra*; Longinus, *Περὶ ὑψους*. Translations, Essays, Prose Composition.

A voluntary class for Greek Verse will be formed.

Written Translations and Prose Composition.

Students will be given Private Hours for Prose.

A Private reading class will be arranged for both First and Second year (voluntary). Pindar, *Nemean*s, will be read with the Second year.

III. ENGLISH LANGUAGE AND LITERATURE.

This Chair was founded by ordinance of the Universities Commission (1858) of date 25th November, 1861, and is in the gift of the Crown.

Professors.

1862. John Nichol, LL.D.

1889. Andrew Cecil Bradley, M.A., LL.D.

1900. W. A. Raleigh, M.A.

1904. W. MACNEILE DIXON, M.A., Litt.D.

N.B.—*Students are strongly advised to take the English Literature Class, as has hitherto been the custom, in the later part of their Course. Those who, for special reasons, desire to take it early should consult the Professor before taking out their class-tickets.*

ORDINARY CLASS.—During session 1906-7 the class will meet daily, except on Saturday, at 11 A.M.

Lectures will be given on Mondays, Tuesdays, Wednesdays, and Thursdays, throughout the session, on the following subjects:—1, Literary Theory; 2, The Early Drama and Shakespere; 3, English Lyrical Poetry; 4, English Literature from Milton to Swift; 5, The History of the English Language.

On Fridays lectures will be given on The French Revolution in English Literature.

The following texts are prescribed for the Degree Examination:—Shakespere, *Hamlet*, *Antony and Cleopatra*; Dryden, *Absalom and Achitophel*, Part I.; Pope, *Moral Essays* and *The Rape of the Lock*; Swift, *Gulliver's Travels*; Palgrave, *Golden Treasury of Songs and Lyrics*.

Students who have already taken the Ordinary Class are permitted to attend the Lectures on three days a week for a Fee of £2 2s. Such attendance cannot be reckoned towards graduation.

HONOURS CLASS.—The class meets daily at 12 noon; on Monday, Wednesday, and Friday for the study of special authors and of selected subjects connected with the history of English Literature (1350-1900); on Tuesday and Thursday for the study of Anglo-Saxon and Middle English. The special authors to be studied during session 1906-7 are Shakespere and Milton. Lectures will also be given on Scottish Eighteenth Century Literature, and on the Development of the English Language from Chaucer to Shakespere.

BRITISH HISTORY CLASS FOR HONOURS IN ENGLISH. —
See p. 88.

DEGREE EXAMINATIONS.—The subjects for these in October, 1906, and April and October, 1907, will be found on p. 223. Students are advised to present themselves for their examination in the April or October immediately following their attendance of the Ordinary Class, as the subjects studied in class will be changed from year to year.

IV. FRENCH LANGUAGE AND LITERATURE.

This Lectureship was instituted by the University in 1895.

Lecturers.

1895. Alfred Mercier, L. ès L.

1898. CHARLES MARTIN, M.A. (Paris), O.A.

N.B.—Students are advised *not* to take the French Language and Literature Class in the first year of their studies at the University. Their work will be more thorough if it is done on a good English and classical foundation.

I. ORDINARY CLASS.—The French Ordinary Class meets daily at 11 A.M. The class is conducted in French, but will be partly conducted in English, during the first weeks of the session, if found necessary.

The work of the class will comprise the following subjects :

A. *Literature*.—1. La Fontaine et la Société française au xvii^e siècle. 2. Victor Hugo, poète. 3. Michelet. 4. Leçons sur l'histoire générale de la littérature française au xix^e siècle.

La Fontaine: *Fables*, Edition Clément chez A. Colin. *Extraits de Victor Hugo* (Delagrave). Michelet: *Notre France*. Faguet: *Etudes littéraires du xix^e siècle*.

B. *Language*.—Translations into and from French and French essays will be corrected. Lectures on French Composition.

History of the French Language; Historical Grammar.
Lectures on French Phonetics.

A tutorial class meets for the study of pronunciation and the correction of exercises.

A class library, well provided with books of reference, is open to the students from 9 A.M. till 5 P.M.

Students who take French for purposes of graduation must attend both classes; but students who do not intend to graduate may take the Language class alone or the Literature class alone. The fee for one class alone is £2 2s.

II. HONOURS CLASS.—This Class will meet three times a week at 12.15 p.m.

A. La critique littéraire de 1800 à 1850: Mme. de Staël, Villemain, St. Marc-Girardin, Ste. Beuve, Taine.

B. Montesquieu et Jean-Jacques Rousseau.

C. Lecture avec commentaires philologiques et littéraires des ouvrages suivants: (1) Gaston Paris, *Extraits de la Chanson de Roland et Chrestomathie du Moyen-Age*; (2) *Extraits des Chroniqueurs français* (Edition Gaston Paris—Hachette); (3) Pelissier, *Extraits des Poètes français du xvi^e siècle*.

D. Exposé de quelques questions de grammaire historique (Text-Book: A. Darmesteter, *Grammaire historique de la Langue française*).

E. Travaux pratiques: leçons faites par les Etudiants, discussion de travaux écrits.

Traductions et Compositions françaises.

V. GERMAN LANGUAGE AND LITERATURE.

This Lectureship was instituted by the University in 1899.

Lecturers.

1899. Alexander Tille, Ph.D.

1900. GEORGE P. THISTLETHWAITE, B.A., Ph.D.

I. ORDINARY CLASS.—The German Ordinary Class meets daily at 10 a.m. in the Conveyancing Class Room, and the course, which extends to one hundred meetings, qualifies for graduation in Arts. Students who do not intend to graduate may take either the Literature class or the Language class alone. Part of the work will be done in German, as soon as the students are sufficiently advanced for it. The fee for one class is £2 2s.

A. *Language*.—Mondays, Wednesdays, and Fridays. 1. Higher German Grammar. 2. Translation of parts of the following works: Goethe, *Tasso*, *Dichtung und Wahrheit*;

Lessing, *Minna von Barnhelm*; Schiller, *Maria Stuart*; Kohlrausch, *Das Jahr 1813* (Pitt Press); Selections from a sixteenth century Text. 3. German Prose Composition: Translation at sight into German. Text-books: Brandt, *Grammar of the German Language*; Buchheim, *Materials for German Prose Composition* (large edition).

B. *Literature*.—Tuesdays and Thursdays. A course of lectures will be given on the chief Classical period down to the death of Schiller. Text-book: Robertson, *History of German Literature*; or Kluge, *Geschichte der deutschen National-Litteratur*.

Students who intend to take the Honours Course in German should consult the Lecturer before doing so.

II. HONOURS CLASS.—This Class will meet on Mondays, Thursdays, and alternate Wednesdays at 12.15 p.m.

1. *Literature*: The Romantic School. 2. Historical Grammar and Middle High German Grammar. 3. Interpretation of parts of Middle High German Texts: *Der arme Heinrich*; *Walther von der Vogelweide*; (edition) *Deutsche Classiker des Mittelalters*, Brockhaus, Leipzig. 4. Interpretation of selections from 16th century Texts. 5. E-says. Text-books: Kluge, *Geschichte der deutschen National-Litteratur*; Scherer, *History of German Literature*; Paul, *Mittelhochdeutsche Grammatik*; Wright, *Middle High German Grammar*; Sahr, *Hans Sachs und Johann Fischart*; Behagel, *Historical Grammar of the German Language*.

As the subjects for Graduation may change from year to year, students are advised to take the examination in the April or October immediately following their attendance of the Class Lectures.

VI. ITALIAN LANGUAGE AND LITERATURE.

This Lectureship was instituted by the University Court in 1902.

Lecturer—SIGNOR FERNANDO AGNOLETTI, D.Litt.

An Italian Elementary Class will meet twice weekly, if possible at an hour to suit the convenience of students. It will deal chiefly with exercises on Language, and will close

with a short sketch of Italian Literature. Modern Italian prose and easy poetry will be read. Text-books: Collodi, Pinocchio; S. Ferrari, *Antologia della poesia italiana*.

ORDINARY CLASS.—This Class will meet daily at an hour to be fixed in agreement with the students.

Language. Short epitome of Italian Grammar Translations. Prose compositions. Fonologia. Reading of modern prose and poetry. Ritmica e metrica.

Literature. Early verse and prose fiction. The Novella from Boccaccio to Bandello (XIV.—XVI. cent.). Outline of the history of fiction from Bandello to Ugo Foscolo (XVI.—XVIII. cent.). Manzoni. Lyrical poets of the Dante circle; Lyrical poets of the Nineteenth Century.

Text-books: for Language: Goldoni, *La Locandiera*; Leopardi, *Opere*; Pascoli, *Myricae*. For Literature: Boccaccio, *Decamerone*; Manzoni, *I promessi sposi* (edizioni posteriori al 1840); Carducci, *Discorsi letterari e storici*.

Students may attend either one or both.

HONOURS CLASS.—This class will meet on Tuesdays and Thursdays, and on the first ten Mondays of the Session, at an hour to be fixed in agreement with the students.

Dante: *Vita Nuova*, *Paradiso*. Poetry and cortesia in the XV., XVI. centuries. Machiavelli. Outline of the history of the Language. Text-books: Gorra, *Morfologia italiana*. *La Vita Nuova* (Passerini, Firenze). *La Divina Commedia* (Casini, Firenze). *Il Principe* (Lisio, Firenze).

Passages will be read from the works of Lorenzo dei Medici, Leonardo, Ariosto, Castiglione.

The classes are open to both men and women.

VII. HEBREW.

(See under Faculty of Theology, p. 139.)

VIII. ARABIC.

(See under Faculty of Theology, p. 140.)

IX. CELTIC.

(See page 157.)

B. MENTAL PHILOSOPHY.

I. LOGIC AND RHETORIC.

This Professorship is one of those founded in the charter of *Nova Erectio* in 1577. The Professor is elected by the University Court.

Professors from the year 1727.

1727. John Loudon.	1827 ² . Robert Buchanan, LL.D.
1751. Adam Smith, LL.D.	1864. John Veitch, LL.D.
1752. James Clow.	1895. Robert Adamson, LL.D.
1787 ¹ . George Jardine, M.A.	1902. ROBERT LATTA, D.Phil.

The Logic Class meets daily, on five days of the week, from 9 to 10 A.M.

The Course of Lectures includes the following subjects:—

I. LOGIC.—The Principles of Deductive and Inductive Logic. Special reference will be made to Mill's *Logic*, Books I., II., and III.

II. PSYCHOLOGY.—A general account of the composition and development of Mind, with a more detailed consideration of the process of knowledge.

III. METAPHYSICS.—An introduction, historical and critical, to the general questions of Modern Philosophy. The historical reference will concern mainly the doctrines of Descartes, Locke, Berkeley, and Hume.

Students before entering the class are recommended to read some elementary work on Formal Logic, such as Jevons' *Elementary Lessons in Logic*, Fowler's *Deductive Logic*, or Mellone's *Introductory Text-book of Logic*, and also some elementary book on Psychology, such as Stout's *Groundwork of Psychology*.

An advanced class is held in which lectures are given on some of the subjects prescribed for Honours in Mental Philosophy. During next session this class will meet at 11 A.M., on three or four days weekly.

Students before entering the honours class are recommended to read (1) the sections on pre-Kantian philosophy in any history of Modern Philosophy, *e.g.* Höffding, Falckenberg, Erdmann, or Adamson, and (2) Some history of Greek Philosophy (period before Plato), as Zeller, Burnet, Erdmann, or Gomperz. Janet and Séaille's *History of the Problems of Philosophy* should also be consulted.

¹ Mr. Jardine was assistant and successor to Mr. Clow from 2nd June, 1774.

² Mr. Buchanan was assistant and successor to Mr. Jardine from 1st October, 1824.

II. MORAL PHILOSOPHY.

This Professorship was founded by the charter of *Nova Erectio* in 1577. The Professor is elected by the University Court.

Professors from the year 1727.

1727. Gerschom Carmichael.	1796 ¹ . Archd. Arthur, M.A.
1730. F. Hutcheson, LL.D.	1797. James Mylne, M.A.
1746. Thomas Craigie.	1839. William Fleming, D.D.
1752. Adam Smith, LL.D.	1866. Edward Caird, D.C.L.,
1764. Thomas Reid, D.D.	LL.D.

1894. HENRY JONES, LL.D., F.B.A.

N.B.—No student, who is proceeding to a degree, shall be allowed to attend the class of Moral Philosophy during the first session of his or her course, except by the express permission of the Professor.

The Moral Philosophy Class meets at 8 A.M. on five days of the week.

In this class Moral Philosophy is treated both historically and systematically. In connection with the systematic part of the course lectures are given on the metaphysical and psychological implications of Morals, and in connection with the historical part the development of Morals is traced, and an account given of some of the main ethical theories of ancient and modern times.

The work of the class will further comprise the study of (1) Janet and Séaille's *History of the Problems of Philosophy*, Vol. II., Part II.; (2) Plato's *Republic* (translation by Davies and Vaughan), and students are recommended to read in conjunction therewith Bosanquet's *Companion to Plato's Republic*, or Nettleship's *Philosophical Lectures and Remains*, Vol. II.

In the Higher Moral Philosophy Class the Professor will lecture on some of the subjects prescribed for the Degree with Honours; and, in connection therewith, will deliver a part of the course of Lectures of the Political Philosophy Class.

During next session this class will meet at 12 noon on Mondays, Tuesdays, and Wednesdays.

POLITICAL PHILOSOPHY.

Lecturer—ROBERT A. DUFF, D.Phil.

In the Political Philosophy Class a full course of 50 Lectures will be delivered during the Winter Session. It is intended

¹ Mr. Arthur was assistant and successor to Dr. Reid from 22nd May, 1780.

to meet the requirements, in this subject, of students preparing for the Degree of M.A. with Honours in *Mental Philosophy*, or in *Economic Science*, and for the Examinations of the Civil Service in Political Science.

The Course of Lectures will include a discussion of the main theories as to the nature and functions of the State; a critical account of the growth of social institutions; and an analysis of the moral principles underlying political rights and obligations. In different years such problems as The History of the Poor Law, The Methods of Charitable Relief, Criminology and the theory of Punishment, Local and Imperial Government, and Methods of Social Regeneration and Progress will also be dealt with.

Students will be expected to pursue during the Session a course of reading in prescribed portions of books dealing with the subjects treated of in the Lectures, and, in particular, to acquire an accurate knowledge of Aristotle's *Politics*, Burke's *Reflections on the French Revolution*, Green's *Principles of Political Obligation*, and Sidgwick's *Elements of Politics*.

In addition to this Winter Class, Lectures may be delivered during the Summer Session, should there be sufficient demand for them. During next Winter the Class will meet at 12 o'clock on Thursdays and Fridays, and at 11 o'clock on Wednesdays.

III. POLITICAL ECONOMY.

This Chair (called the Adam Smith Chair of Political Economy) was founded by Ordinance No. 149 of the Universities Commission (1889) of date 25th February, 1896, with an endowment of fifteen thousand pounds sterling, given by Mr. Andrew Stewart, merchant, Glasgow. The patronage is vested in the University Court, conjointly with one representative from time to time elected by the Merchants' House of the City of Glasgow, one representative from time to time elected by the Trades' House of the City of Glasgow, and one representative from time to time elected by the Chamber of Commerce of the City of Glasgow. The professor is a professor in the Faculties of Arts and Law.

Before the founding of the Chair, Political Economy was attached to the Chair of Moral Philosophy till 1892, when a separate lectureship was instituted by the University.

Professor.

1896. WILLIAM SMART, M.A., D.Phil., LL.D.

The Political Economy Ordinary Class meets at 2 P.M.

The Lectures, which are partly doctrinal, partly historical, are intended to accompany the study of prescribed books. The first part of the course will deal with Demand and Consumption: the Agents of Production—Land, Labour, Capital, and Organization: Theory of the Equilibrium of Demand and Supply: Value, or Distribution and Exchange: Trade Unions. (Text-books: Marshall, *Elements of Economics of Industry*, third edition, 1899; Smart, *The Distribution of Income*.) Thereafter Money, Credit and Banking, and International Trade will be taken up. (Text-books: Gide, *Political Economy*, Book II.; Smart, *The Return to Protection*.) For preparatory reading students are recommended to Gide's *Political Economy* (Isbister, London, or eighth French edition, 1903, Larose, Paris).

HONOURS CLASS. The Class meets at 3 P.M. Subjects: Taxation and Public Finance, with some study of the Theory of the State. Special study will be made of the activities and finance of municipalities, and of current economic problems as they present themselves.

Students are recommended to confine themselves for preparatory reading to mastering Marshall's *Principles of Economics*, Vol. I., Books V. and VI., fourth edition, 1898.

IV. EDUCATION.

THEORY, ART, AND HISTORY OF EDUCATION.

This Lectureship was instituted by the University in 1894.

Lecturers.

1894. David Ross, M.A., B.Sc., LL.D.

1899. John Adams, M.A., B.Sc.

1902. JOHN CLARK, M.A.

N.B.—Students are strongly advised to take the Education Class not earlier in their course than either the Logic Class or the Moral Philosophy Class.

The Education Class meets daily at 4 P.M. The course consists of one hundred lectures qualifying for graduation in Arts.

A. THEORY.—The nature and limits of Education; its principles; its logical, psychological, and ethical bases.

B. ART.—Communication between minds; method in general and the evolution of modern methods; sequence of studies and their relative values, utilitarian and disciplinary.

C. HISTORY.—Educational systems in general; special study of the periods to which the prescribed text-books refer, and of early Scottish education.

Books for class work and reference.—Bosanquet, *Education of the Young in the Republic of Plato* (Cambridge University Press); Burnet, *Aristotle on Education* (Cambridge University Press); Ascham, *Schoolmaster* (Cassell & Co.), pp. 10-105; Rousseau, *Émile* (International Education Series), Books II., III.; Adams, *Herbartian Psychology applied to Education* (Isbister); Herbert Spencer, *Education* (Watts & Co.).

V. PHILOSOPHY OF LAW.

(See under Faculty of Law, p. 136.)

C. SCIENCE.

I. MATHEMATICS.

This Professorship, long suppressed for want of funds, was revived by an Act of Faculty in 1691. The Professor is appointed by the University Court, and is a member not only of the Faculty of Arts, but also, since 1893, of the Faculty of Science.

Professors from the year 1691.

1691. George Sinclair.	1796 ¹ . James Millar, M.A.
1699. Robert Sinclair, M.D.	1832. James Thomson, LL.D.
1711. Robert Simson, M.D.	1849. Hugh Blackburn, LL.D.
1761. James Williamson, D.D.	1879. WILLIAM JACK, LL.D., D.Sc.

Ordinary Class.

Subjects: *Euclid*, Books IV., VI., and XI. 1—21, more advanced *Algebra*, and the Elements of *Transversals* and of *Analytical Geometry of the straight line and circle*, *Trigonometry*, including solution of triangles. Two parallel subdivisions of

¹ Mr. Millar was assistant and successor to Dr. Williamson from 26th Feb., 1789.

the Class meet daily (except on Saturdays), one from 9 to 10, and one from 12 to 1.

Intermediate Honours Class.

Subjects: *Plane Trigonometry, Analytical Conics, Differential and Elements of Integral Calculus.* There will be two divisions of the Class, one meeting from 10 to 11, and one meeting from 11 to 12, daily, except on Saturdays.

Advanced Honours Class.

Subjects: *Integral Calculus, Spherical Trigonometry, Geometry of Three Dimensions, Differential Equations.* The class meets at 11-12 on Mondays, Wednesdays, and Fridays.

For the "Lorimer," the "Metcalf," and the "Muir" Bursaries in Mathematics, see under Bursaries; and for the Cunninghamhame Gold Medal, see under Prizes.

II. NATURAL PHILOSOPHY.

This Professorship was founded by the Charter of *Nova Erectio* in 1577; and the Professor was confined to the department of Natural Philosophy in 1727. The Professor is elected by the University Court, and is a member not only of the Faculty of Arts, but also, since 1893, of the Faculty of Science.

Professors from the year 1727.

1727. Robert Dick.

1751. Robert Dick, M.D.	1803. W. Meikleham, LL.D.
1757. John Anderson, M.A.	1846. Lord Kelvin, D.C.L.,
1796. James Brown, LL.D.	LL.D., F.R.S.

1899. ANDREW GRAY, LL.D., F.R.S.

Lecturers.

PHYSICS, - - - G. W. Walker, M.A.
ELECTRICITY—PURE AND APPLIED, James Muir, D.Sc., M.A.

University Assistant.

G. W. Walker, M.A.

Arnott and Thomson Demonstrator.

James Muir, D.Sc., M.A.

Second Assistant.

James G. Gray, B.Sc.

I. ORDINARY CLASS (*Lectures*).—The Ordinary Natural Philosophy Class meets daily at 9 A.M. The main divisions of the course are Elementary Dynamics and Properties of Matter, Sound, Heat, Light, Magnetism and Electricity. The lectures are fully illustrated by experiments. A detailed programme of the course will be published before the beginning of the session and supplied to students on application at the Physical Laboratory.

Tutorial Class.—Students attending the Ordinary Class are recommended also to attend the Tutorial Class, which meets on Tuesdays and Thursdays at 11 A.M. The work done in this class consists largely of numerical and other examples dealing with the subject-matter of the Ordinary Class lectures.

II. SPECIAL GRADUATING CLASS (*Lectures and Practical Work*).—This class has been instituted to meet the wants of King's students and others who desire to become Teachers of Physics, or who may wish to obtain a practical training in the use of physical instruments. Five meetings of the class will be held in each week, but at least two of these meetings will be of two hours' duration, and will be devoted to practical work performed in the Physical Laboratory by the students working singly or in pairs. The other meetings of the class will be devoted to Systematic Lectures in which the principles of Natural Philosophy will be explained and illustrated by experiments and examples shown in the Lecture-room.

As far as possible the experiments performed in the practical work of each week will be illustrative of the work done in the Systematic Lectures of that week. Each student will be required to keep a careful record of the practical work done by him: this record must be submitted for inspection by the Degree Examiners.

In addition to examination by written papers each candidate for a degree will, if he has taken this class, undergo an oral examination, which will include questions on the practical use of instruments and methods of experimenting.

Hours, to be arranged.

The Fee charged will be £4 4s. with Two Guineas additional for Practical Work.

III. HIGHER MATHEMATICAL CLASS, A.—This class meets three times a week, on Mondays, at 1 P.M., and on Wednesdays and Fridays, at 12 noon, and is suitable for Honours Students

and students who are proceeding to the Degree of B.Sc. in Pure Science.¹

The work comprises the Mathematical Theories of selected special branches of Natural Philosophy. The subjects treated in next session will be Higher Dynamics, and one or more of the following: Thermodynamics, Electromagnetism, Wave Theory of Light, Conduction of Heat.

IV. HIGHER MATHEMATICAL CLASS, B.—This class deals mainly with Dynamics, which will be treated in such detail and with such reference to practical problems as may render it suitable for Students of Engineering. A knowledge of Elementary Differential and Integral Calculus only will be assumed in this class, and students who desire to join it are strongly advised to begin the study of this branch of mathematics at least in the preceding summer. Professor Gibson's Elementary Treatise on the Calculus will be found useful in connection with this class. The class will meet on Mondays, Tuesdays, and Thursdays at 12 noon throughout the session. Attendance upon it will qualify for the Degree of B.Sc. in Engineering Science.

V. ELECTRICITY PURE AND APPLIED.—This class will meet at 12 noon on Wednesdays and Fridays, during the Winter Session, if a sufficient number of students present themselves. The course is one of the options for the Degree of B.Sc. in Engineering Science.

It is very desirable that students attending this class should either be attending or have already attended a course of Practical Physics in the Physical Laboratory.

VI. PHYSICAL LABORATORY.—Experimental Courses will be given in the Physical Laboratory from 10 to 4 daily throughout the Winter and Summer Sessions.

A. *Ordinary Course.*—This is the qualifying course for the Science Degrees. It is suitable for ordinary students of Natural Philosophy, and is recommended to all whose arrangements will permit of their taking a laboratory course. Attendance may be made up of three months in the Winter Session

¹The Course in Natural Philosophy for the Final Examination for the Degree of B.Sc. in Pure Science consists of the Higher Mathematical Class (II., A) and the Laboratory Course (B).

together with the Summer Session. A student may qualify for the Degree of B.Sc. in Engineering Science by attendance in the Summer Session only.

B. Advanced Course.—A series of advanced exercises in Heat, Light, and Electricity has been arranged, and will be carried on during the Winter Session.¹

A syllabus of Courses *A* and *B* may be had on application at the Laboratory; arrangements as to hours of attendance will be made at the beginning of each session.

C. Medical Course.—A Special Class for Practical Work in Physics has been arranged for Medical Students. Students attend in two sets: Set I. from 9 to 11 a.m. on Tuesdays and 1 to 3 p.m. on Thursdays, and Set II. from 1 to 3 p.m. on Tuesdays and 9 to 11 a.m. on Thursdays. Fee £2. 2s.

D. Research Work.—Research work is carried on daily under the superintendence of the Professor, his Official Assistant, and the Arnott and Thomson Demonstrator.

Research Students in 1904-5.—George E. Allan, D.Sc.; Alexander D. Ross, M.A.; Robert Jack, M.A., B.Sc.; and William Miller, M.A., B.Sc.

Books recommended: For I. Ordinary Class.—Watson, *Text-Book of Physics*, and Bottomley, *Mathematical Tables*. For reference, Thomson and Tait, *Elements of Natural Philosophy*; Gray, *Treatise on Physics*, Part I. For II. Special Graduating Class.—Watson, *Text-Book of Physics*; Shuster and Lees, *Intermediate Course of Practical Physics*. For III. Higher Mathematical Class (A.).—Gray, *Treatise on Physics*, Part I.; and Treatises recommended in connection with special subjects treated. For IV. Higher Mathematical Class (B.).—Gray, *Treatise on Physics*, Part I. For V. Electricity Pure and Applied—Gray, *Absolute Measurements in Electricity and Magnetism* (smaller treatise); Maclean, *Physical Units*. For VI. Physical Laboratory.—Stewart and Gee, *Elementary Practical Physics*; Glazebrook and Shaw, *Practical Physics*; Gray, *Absolute Measurements in Electricity and Magnetism* (smaller treatise). For reference, Kohlrausch, *Physical Measurements*; Wiedemann, *Elektricität*; Gray, *Theory and Practice of Absolute Measurements in Electricity and Magnetism*.

¹ See note on preceding page.

PHYSICS.

Lecturer—GEORGE W. WALKER, M.A.

The lectures of this course are designed primarily for students proceeding to the First Professional Examination in Medicine. They are delivered daily at 11 A.M. during the Summer Session in the Natural Philosophy Department, and embrace the fundamental principles of the Dynamics of Solids, Liquids, and Gases, and the rudiments of Sound, Light, Heat, Magnetism, and Electricity. A detailed programme of the subjects of the course, containing the titles of books recommended for use by students and of works which may be consulted, is given to each student at the beginning of the course.

Two written examinations are held during the session, and the Class meets for a tutorial hour weekly in which additional instruction is given by oral examination and by exercises on the previous lectures.

For the Arnott Prize in General Physics, see Index.

ELECTRICITY—PURE AND APPLIED.

Lecturer—JAMES MUIR, D.Sc., M.A.

(See p. 85 above.)

III. ASTRONOMY.

(See under Faculty of Science, page 90.)

IV. CHEMISTRY.

(See under Faculty of Medicine, page 107.)

V. ZOOLOGY.

(See under Faculty of Medicine, page 106.)

VI. BOTANY.

(See under Faculty of Medicine, page 105.)

D. HISTORY AND LAW.

I. HISTORY.

This Chair was founded by Ordinance No. 28 of the Universities Commission (1889) of date 5th June, 1893. The Professor is appointed by the University Court.

Professors.

1894. Richard Lodge, M.A.

1899. DUDLEY J. MEDLEY, M.A.

ORDINARY CLASS.—The Class meets daily at 10 A.M., except on Saturdays. The course consists of one hundred lectures qualifying for graduation.

In session 1905-6 the Professor will lecture on the Outlines of European (including British) History from A.D. 476. The prescribed text-book is Bryce, *Holy Roman Empire*. Students are recommended to read in addition either the Students' Gibbon (two vols.) together with Lodge, *Modern Europe*, or *Periods of European History* (Rivington).

HONOURS CLASS.—This Class meets on Mondays, Wednesdays, and Fridays, at 11 A.M. During session 1906-7 the Professor proposes to lecture on the History of the Middle Ages: A.D. 476-1272, with especial reference to the period A.D. 800-1272.

Students who intend to join this class would do well to study the geography of continental Europe, and, if possible, to acquire some facility in reading ordinary narrative French. They are also recommended to read the following books—Bryce, *Holy Roman Empire*; Church, *Beginning of the Middle Ages*; Guizot, *History of Civilisation in France*.

During session 1907-8 the Professor proposes to lecture on British History, A.D. 1688-1832.

BRITISH HISTORY CLASS FOR HONOURS IN ENGLISH AND IN ECONOMIC SCIENCE.

Lecturer—KENNETH K. M. LEYS, B.A.

This Class meets on Mondays, Wednesdays, and Fridays, at 10 A.M.; and is more particularly concerned with the periods of British History prescribed for Honours in English.

During the session 1906-7 the subject for lecture will be "The Renaissance and Reformation in English History"; the earlier lectures of the course will deal with those political and social movements of the fourteenth and fifteenth centuries, which lead up to the expansion of the subject in the sixteenth century.

The period may be studied in the following books: *Monumenta Franciscana*, I., Ed. Brewer, Rolls Series, Introduction; Langland, *Piers Plowman*; Trevelyan, *England in the age of Wycliffe*; Gairdner, *Introduction to the Paston*

Letters; Seebohm, *Oxford Reformers*, in conjunction with More, *Utopia*, and Roper, *Life of More*; Pollard, *Henry VIII.*; Einstein, *The Italian Renaissance in England*; Gairdner, *History of the English Church to the death of Mary*; Latimer, *Sermons*; Hales, *Commonwealth*; Pollard, *The Protector Somerset*; Creighton, *Queen Elizabeth*; Hume, *Philip II.*; Hooker, *Ecclesiastical Polity*; Paget, *Introduction to the Fifth Book of Hooker*. Reference should also be made to these longer works: Creighton, *History of the Papacy*; Froude, *History*; and Dixon, *History of the English Church*.

NOTE.—The classes recognized as Honours Classes in the Group of HISTORY are the Honours Classes held by the Professor of History and by the Lecturer in Constitutional Law and History.

II. CONSTITUTIONAL LAW AND HISTORY.

Lecturer.

1894. WILLIAM S. McKECHNIE, M.A., LL.B., D.Phil.

ORDINARY CLASS.—This class now extends to a hundred meetings, and qualifies as a full course for graduation both for the ordinary M.A. and for Honours in History. (For subjects of study, text-books, etc., see under Faculty of Law, page 135.)

HONOURS CLASS.—In the winter session of 1906-7, in the event of any candidates for Honours in History presenting themselves, a course of fifty lectures (qualifying *pro tanto* for graduation with Honours) will be given on the early Constitutional History of England till 1295. The class text-book will be Stubbs, *Select Charters*. Before joining the class students are advised to read Medley, *Constitutional History*, and the following works are suggested for the use of students before or during the session:—Stubbs, *Constitutional History*; Pollock and Maitland, *History of English Law*; McKechnie, *Magna Carta*. The class meets on Mondays, Wednesdays, and Fridays at 12 noon.

III. ROMAN LAW.

(See under Faculty of Law, page 134.)

II.—FACULTY OF SCIENCE.

The Faculty of Science was instituted by Ordinance No. 31 of the Universities Commission (1889) of date 5th June, 1893, and embraces the classes of Mathematics, Natural Philo-

sophy, Astronomy, Chemistry, Geology, Zoology, Botany, Anatomy, Physiology, Civil Engineering and Mechanics, and Naval Architecture. In this Faculty there are also classes in Electricity—Pure and Applied, Electrical Engineering, Mining, Physical Chemistry, Organic Chemistry, Metallurgical Chemistry, and Public Health.

I. MATHEMATICS.

(See under Faculty of Arts, page 82.)

II. NATURAL PHILOSOPHY.

(See under Faculty of Arts, page 83.)

III. ASTRONOMY.

The Professorship of Practical Astronomy was founded in the year 1760, conjointly with the office of Observer in the University of Glasgow, and is in the gift of the Crown. By Ordinance No. 31 of the Universities Commission (1889) of date 5th June, 1893, it is now called Astronomy, and the Professor is a member of the Faculty of Science, the Chair having been transferred by the Universities Commission in 1893 from the Faculty of Arts to the newly instituted Faculty of Science.

Professors.

1760. Alex. Wilson, LL.D.	1803. James Cooper, D.D.
1784 ¹ . Patrick Wilson, LL.D.	1836. John P. Nichol, LL.D.
1799. W. Meikleham, LL.D.	1859. R. Grant, LL.D., F.R.S.
1893. LUDWIG BECKER, Ph.D., F.R.A.S.	

An Observatory has always existed in connection with this Chair. The present Observatory is situated on an eminence in the vicinity of the University buildings.

Dr. Wilson, the second occupant of the Chair, bequeathed to the University the sum of one thousand pounds, upon the condition that the interest thereof should be applied to the purchase of instruments and books for the use of the Professor of Astronomy and the students attending his prelections.

The Trustees of the Bellahouston Bequest Fund made in 1894 a grant of eleven hundred pounds for the improvement of the Observatory.

The Professor of Astronomy who is chiefly occupied in directing the operations of the Observatory delivers a Course

¹ Dr. P. Wilson was assistant to his father from 5th June, 1782.

of Lectures on Astronomy at the University during the session, and gives expositions on instruments and methods of observation at the Observatory.

First Class.

Subjects: Elementary Mathematical Astronomy—The celestial sphere, description and theory of instruments, determination of latitude and time. Spherical Astronomy—Precession, Nutation, Aberration, Figure of the Earth. Deductions from Kepler's Laws, Occultations.

The class meets at 3 p.m. on Mondays, Wednesdays, and during the first half of the session on Fridays. Practical Demonstrations at the Observatory.

Book recommended for general reading:—Charles A. Young, *Manual of Astronomy* (Ginn & Co., Boston and London, 1902).

Second Class.

Subject: Celestial Dynamics.

The students ought to be well prepared on the subjects of the Intermediate Honours Mathematical Class.

The class meets at 3 p.m. on Tuesdays and Thursdays, and during the second half of the session on Fridays.

Attendance on the two classes, either in the same session or in different sessions, counts as a full course for the Degree of M.A. The first and second classes, which may be taken in one session, with practical work at the Observatory, are a full course for the Degree of B.Sc.; the practical work at the Observatory may be done during the winter or summer session, and the student may undergo his Degree examination before he has finished his practical work.

IV. CHEMISTRY.

(See under Faculty of Medicine, page 107.)

ORGANIC CHEMISTRY.

This Lectureship was instituted by the University Court in 1905.

Lecturer.

T. S. PATTERSON, Ph.D.

A general course of 40 lectures is delivered during the summer session. This class, which counts as a half course,

must be taken by all offering Chemistry for the Final Science Examination. The time of meeting is arranged, so far as possible, to suit the convenience of students who wish to attend.¹

In the course, the chemistry of the aliphatic compounds will be sketched, important subjects such as the carbohydrates, aceto-acetic ester and malonic ester syntheses, stereoisomerism, the ureides, etc., being treated in some detail. Thereafter the chemistry of the carbo-cyclic, and a few of the more important hetero-cyclic compounds, is fully described, special attention being devoted throughout to the results of recent research. The lectures are illustrated by experiments, but since students taking the class are advised to take a laboratory course at the same time, when they may themselves carry out the more important operations described and prepare specimens of typical organic compounds, these experiments will only be such as are of a somewhat special character, and not suitable for general laboratory work.

Books recommended:—A. F. Hollemann, *Text-book of Organic Chemistry*; J. B. Cohen, *Theoretical Organic Chemistry*; A. Bernthsen, *A Text-book of Organic Chemistry*. (*A new Edition is in preparation.*) V. Meyer and P. Jacobson, *Lehrbuch der Organischen Chemie*.

J. B. Cohen, *Practical Organic Chemistry for Advanced Students*; L. Gattermann, *Practical Methods of Organic Chemistry*.

(For Elementary Courses in Organic Chemistry, see Faculty of Medicine, p. 109.)

METALLURGICAL CHEMISTRY.

This Lectureship was instituted by the University in 1899.

Lecturer.

CHARLES E. FAWSITT, D.Sc., Ph.D.

Two courses of lectures are given. Course "A" meets from October till December, and Course "B" from January till March. Either course will be repeated in the Summer Session if a sufficient number of students present themselves. Each class meets three days a week.

Class "A." The subjects taken up are fuels, refractory

¹ The class met in 1905, from 4.15 to 5.15 p.m.

materials, minerals, ores, and the extraction of metals from their ores (including electro-metallurgy).

Class "B." The subjects taken up include microscopical structure of metals, alloys, and amalgams, the physical and chemical properties of metals, and important compounds.

Practical Course.—Students receive instruction during Winter and Summer Sessions in assaying and general metallurgical work.

Excursions are arranged throughout the Session.

Text Books recommended :

Hiorns, *Principles of Metallurgy* ; Sexton, *Fuel and Refractory Materials* ; Osmond-Stead, *Microscopic Analysis of Metals* ; Brown and Griffiths, *Manual of Assaying*.

PHYSICAL CHEMISTRY (INCLUDING RADIO-ACTIVITY).

This Lectureship was instituted by the University Court in 1904.

Lecturer.

1904. FREDERICK SODDY, M.A.

I. PHYSICAL CHEMISTRY.

This class, together with practical work in the Physical Chemistry laboratory, must have been taken by all offering chemistry for the Final Science Examination. It will be held during the first half of the Winter Session daily (except Saturdays), at 9 a.m., and will comprise 40 lectures.

Syllabus.—Historical development of chemical theory ; the relations between matter and energy ; the atomic and molecular theories ; conservation of energy and the laws of thermodynamics ; detailed study of gases ; the relations between the gaseous and liquid states ; the methods of liquefaction of gases and of refrigeration ; chemical change and chemical dynamics ; equilibrium and balanced actions ; dissociation, explosion, tautomerism ; solutions and osmotic pressure ; molecular weight of dissolved substances ; relations between liquids and solids ; eutectics and cryohydrates ; phase rule ; laws of thermochemistry ; electro-chemistry ; electrolysis ; theory of electrolytic dissociation of solutions ; electro-motive force of chemical change ; electro-technical chemical processes ; recent advances and methods of inorganic chemistry, including some selected researches.

Books recommended :—Walker's *Introduction to Physical Chemistry*, or Ostwald's *Outlines of General Chemistry*, *Text Books of Physical Chemistry*, edited by Sir William Ramsay.

In conjunction with these lectures a practical class will be held during the last six weeks of the Winter Session. The Physical Chemistry Laboratory will be open daily for this purpose, and Class Certificates will not be given until the Practical Course has been taken.

Syllabus.—Determination of molecular weights by vapour density, freezing point and boiling point methods; conductivity of electrolytes; electro-chemical equivalents; measurement of single potential differences; electro-chemical analysis of metals; electrolytic and electric furnace chemical preparations; use of refractometer, polarimeter, and spectroscope in chemistry; determination of reaction velocity; gas manipulation and gas analysis; radio-active measurement, and analysis of radio-active constituents in minerals.

II. RADIO-ACTIVITY.

A course of fifteen lectures in this subject will be held during the second half of the Winter Session on Tuesdays and Thursdays at 9 a.m. The course is designed to cover the important developments of recent years following on the discoveries of new types of radiation, and is recommended to candidates for the Final Science Examination, and for advanced medical students.

Syllabus.—Radiation phenomena; cathode-rays and X-rays; the radio-active elements, uranium, thorium, radium, polonium, and actinium; the distinguishing features of their radio-activity; methods of measuring radio-activity; the ionisation of gases; the α , β , and γ rays; the radio-active emanations and induced activity; thorium X and uranium X; radio-active change; theory of atomic disintegration; the transmutation of radium; the internal energy of the chemical elements; the bearing of radio-activity on other sciences; the evolution of the elements; the economic aspect of atomic disintegration, and its connection with the theory of currency.

The course will be experimentally illustrated, and arrangements will be made in the physical chemistry laboratory for

practical instruction and original research in this subject. Books recommended:—E. Rutherford, *Radio-activity*; F. Soddy, *Radio-activity, an Elementary Treatise*.

V. GEOLOGY.

This Chair was founded by the University Court Ordinance No. VIII.¹ (Glasgow, No. 3) issued on 12th February, 1903, and approved by His Majesty in Council on 11th August, 1903, an endowment of fifteen thousands pounds sterling having been provided by the Carnegie Trust, the Bellahouston Trust, and other Donors. The Professor is appointed by the University Court, and is a Professor in the Faculty of Science.

In 1876 the late Mrs. Honyman Gillespie of Torbanehill, endowed a Lectureship in Geology, to be called the Honyman Gillespie Lectureship, in memory of her husband, W. Honyman Gillespie, Esq. The Lectureship was attached by the Deed of Foundation to the Chair of Natural History, but power was given to the Trustees to withdraw it from that chair and to attach the income to the Chair of Geology when founded. The Trustees have agreed to exercise that power and pay over the annual income of the Honyman Gillespie Lectureship to the University Court to augment the salary of the Professor of Geology.

Professor.

1904. JOHN WALTER GREGORY, D.Sc., F.R.S.

Geology is a subject of study for the Degrees of M.A., B.Sc. in Pure Science, B.Sc. in Engineering, B.Sc. in Mining, B.Sc. in Agriculture, and B.Sc. in Public Health. For the Degree in Arts there will be one hundred meetings of the class, including Laboratory and Field Work; for the B.Sc. in Public Health fifty-two meetings, including Laboratory and Field Work; for the B.Sc. in Agriculture eighty meetings, including Laboratory and Field Work; for the B.Sc. in Engineering one hundred meetings, including Laboratory and Field Work. The course for the B.Sc. in Pure Science is divided into two parts: in Part I. the course consists of one hundred meetings, of which fifty are lectures; Part II. consists of one hundred meetings, of which fifty are lectures. Before admission to Part II. a

¹ The text of this Ordinance was printed in full in the University Calendar for 1904-5, pp. 768-770.

student must produce a certificate showing that he has done the work required in Part I. The course for B.Sc. in Mining Engineering comprises fifty meetings, but a higher course of one hundred meetings in Economic and Mining Geology, including Ore deposits and more advanced methods of Geological work, is open to those who have done the practical work (fifty meetings) in connection with the lectures on Geology and Mineralogy in the second year of the course.

VI. ZOOLOGY.

(See under Faculty of Medicine, page 106.)

VII. BOTANY.

(See under Faculty of Medicine, page 105.)

VIII. ANATOMY.

(See under Faculty of Medicine, page 110.)

IX. PHYSIOLOGY.

(See under Faculty of Medicine, page 112.)

X. CIVIL ENGINEERING AND MECHANICS.

The Professorship of Civil Engineering and Mechanics was instituted by Queen Victoria in 1840, and is in the gift of the Crown. The emoluments of the Chair were increased in 1872 by a supplemental endowment¹ by the late Mrs. Elder, widow of Mr. John Elder, engineer and shipbuilder, Glasgow; and more recently, in 1876, an Assistantship was founded by bequest of Mrs. Black, widow of the Rev. Dr. Black, Barony Church, Glasgow.² The University Court instituted a lectureship on Electrical Engineering in 1898, and one on Engineering Drawing and Design in 1901.

Professors.

- 1840. Lewis D. B. Gordon, C.E.
- 1855. William J. Macquorn Rankine, C.E., LL.D.
- 1873. James Thomson, C.E., LL.D., D.Sc., F.R.S.
- 1889. ARCHIBALD BARR, D.Sc., M.Inst.C.E., M.I.Mech.E.

Lecturer on Electrical Engineering.

John S. Nicholson, B.Sc.

¹ The annual income of a sum of £5000.

² The salary for the Young Assistantship thus founded is now £133.

Lecturer on Engineering Drawing and Design.

Henry Bamford, M.Sc., A.M.Inst.C.E.

Young Assistant.

William Alexander.

Demonstrators.

The courses in Engineering extend throughout the winter session, that is, from 18th October till 28th March. They comprise Lectures on Engineering Principles and Practice, Instruction in Geometrical Drawing and in Engineering Drawing and Design, Laboratory Practice, and visits to Engineering Works and Manufactories.

These courses are designed primarily to suit students who intend to devote themselves to Civil, Mechanical, Electrical, or Mining Engineering; but the work of the classes will be found of direct practical utility to architects and to men who are engaged in any occupations connected with manufactures.

The work of the classes is not intended in any way to supersede the usual requirements of pupilage or apprenticeship in Engineering, but to enable the Engineer to gain such a knowledge of the principles underlying his profession or trade as he cannot acquire by only working in the office, in the field, or in the workshop. The classes may be attended either before or after pupilage or apprenticeship, or concurrently therewith. In most cases the students spend the summer six months in works or offices and thus get their scientific and practical training on the "sandwich" system.

Six Courses of Lectures, including Electrical Engineering, are arranged for, five of which are delivered in each session.

CLASS I.—THE MATERIALS OF CONSTRUCTION AND THE ELEMENTS OF APPLIED MECHANICS.—Daily at 9 A.M. Subjects: Preparation, Properties and Uses of the Chief Constructive Materials, especially of Cast Iron, Wrought Iron and Steel, Brass and other Alloys, Timber, Building Stones, Cements and Concrete; Graphics, Steam, Gas, and Oil Engines, and other Prime Movers; and the more Elementary Principles of Mechanics in their application to problems connected with Engineering Structures and Machines.

CLASS II.—SURVEYING, LEVELLING, AND SETTING-OUT OF WORKS.—Mondays, Wednesdays, and Fridays at 10 A.M.—Subjects:—Surveying with the Chain and with Angular Instruments; Telemetry; Levelling; the Optical and Mechanical Principles, Tests, and Adjustments of Surveying and Levelling Instruments; Setting-out of Works, especially Setting-out of Railways; Mensuration of Areas of Land and of Volumes in Earth Works; the Execution of Civil Engineering Works. The Lectures will treat for the most part of those portions of the subject which are not readily learned in ordinary field and office practice.

CLASS III.—PRIME MOVERS AND THE MECHANICS OF MACHINERY.—This class will not be held during the present session. It is held in alternate years with Class II., on Mondays, Wednesdays, and Fridays, at 10 A.M.—The Lectures treat of the Sources of Energy; Fuels; the Theory of Steam and Gas and other Heat Engines; the structural details of Boilers and Engines; the Mechanics of Machinery; the Elements of Machine Design; the Transmission of Power; and Friction and Lubrication in Machines. Attendance on this class should be preceded by attendance on Class I. in the case of students entering with no knowledge of Applied Mechanics.

CLASS IV.—HIGHER APPLIED MECHANICS AND HYDRAULICS.—Daily, except Saturday, at 9 A.M. The Lectures treat of the Strength and Elasticity of Materials, the Strength and Stiffness of Beams, Girders, Columns, Framed Structures, Shafts, etc.; Hydraulics and Hydraulic Appliances, including the Gauging of Water, the Flow of Water in Pipes, and the Principles of Water Wheels, Turbines, and Centrifugal Pumps.

ENGINEERING DRAWING AND DESIGN.—The drawing classroom is open daily, except Saturday, from 9 A.M. till 5 P.M. Each student will be required to attend six hours per week (at times to be arranged at the commencement of the session), and will be expected to devote extra time to the performance of work. The work of the classes will comprise Lectures and Practice in Civil and Mechanical Engineering Drawing; Lectures and Practice in Design of Structures, Descriptive Geometry, Graphical Statics, and the Kinematics of machinery, and the performance of graphical work and calculations in connection with the lecture courses.

ENGINEERING LABORATORIES.—The James Watt Engineering Laboratories, which have been erected and equipped at a total cost of about £40,000, are now complete. A separate description of the Laboratories will be published. The equipment includes a steam boiler for 100 horse power, steam, gas, oil, petrol, and hot-air engines; a 50 horse power steam turbine; a refrigerating plant; 100-ton and 10-ton testing machines arranged for tests in tension, compression, bending, and torsion, and fitted with autographic stress and strain recorders; cement testing appliances; a variety of water turbines; apparatus for experiments on the flow of water through orifices and pipes, and other apparatus for investigations bearing upon Engineering Science and Practice.

The Laboratories are open daily; the hours of attendance are arranged with the individual students.

For the purposes of Ordinance No. 23, Section IX. (see page 247), Class IV., together with Laboratory practice, counts as a whole course; any two of the other Lecture Classes (I., II., III., Electrical Junior, Electrical Senior), together with Laboratory practice, count as a whole course. Candidates taking the second option under Section IX., *i.e.* candidates for the Degree of B.Sc. on the side of Naval Architecture, are required to take Class IV. together with Laboratory practice.

ELECTRICAL ENGINEERING.

A Lectureship in Electrical Engineering was instituted by the University Court in 1898.

Lecturers.

- 1898. John Dewar Cormack, B.Sc.
- 1901. James Blacklock Henderson, D.Sc.
- 1905. John Steel Nicholson, B.Sc., Whit. Sch.

Two classes are held during the Winter Session. For the purposes of Ordinance No. 23, Section IX. (see page 247) the Junior Class, along with Laboratory practice, *or* the Senior Class, with Laboratory practice, counts as a half course, while both classes, along with Laboratory practice, constitute a full course.

The Electrical Laboratory is part of the new James Watt

Engineering Laboratories, and is open daily, except Saturdays, for experimental and research work.

Junior Class—Mondays, Wednesdays, and Fridays at 8 A.M. Subjects:—Practical units of current, quantity, E.M.F., resistance, power, and energy; Ammeters, voltmeters, ohmmeters, wattmeters, and energymeters; Winding of resistances. Cells and the calculation of E.M.Forces; Secondary cells and their chemical reactions; Electrochemical processes. Magnetic properties of iron and steel and their measurement; the magnetic circuit; Hysteresis and hysteresis losses. Electro-magnetic induction and the production of E.M.F.; Development of the dynamo; Winding of field magnets and armatures. Conditions for sparkless commutation; characteristic curves; efficiency of dynamos and motors; methods of testing dynamos and motors. Modern direct current machinery; types of motors; motor starters and controllers; tramway, lift and crane controllers. Direct current distribution; Kelvin's law of economy. Alternating E.M.Forces and currents; relation between mean, maximum and effective values; rotating fields; measurement of alternating currents; E.M.Forces and power; power factors. Alternators; rotary converters; synchronous and induction motors; arc lamps

Text-book: Crapper, *Electric and Magnetic Circuits*.

Books of reference: Sheldon and Mason, *Direct Current Machinery*; Sheldon and Mason, *Alternating Current Machinery*.

Senior Class—Tuesdays, Thursdays, and Saturdays, at 8 A.M. Subjects:—Direct current motors series and shunt; accelerating torque; mechanical characteristic. Dynamo design; relation of size to output; proportioning of parts; choice and calculation of winding; theory of commutation; construction of commutators. Alternate current phenomena; single and polyphase currents; mathematical and graphical treatment of alternating current problems; armature reaction. The working of alternators singly and in parallel; methods of paralleling; armature reaction in polyphase machines and rotary converters; design of polyphase machines; design of transformers. Induction motors, single and polyphase; methods of starting; repulsion motors; compensated asynchronous and synchronous motors and generators. Characteristics of alter-

nators and motors; testing of alternators; compounding of alternators, distribution of power and distribution losses.

Text-book: Steinmetz, *Elements of Electrical Engineering*.

Books of reference: Steinmetz, *Alternating Current Phenomena*; S. P. Thompson, *Polyphase Currents*; Kapp, *Dynamos and Alternators*.

Practical Course—The equipment of the Electrical Laboratories includes a 30 K.W. three-phase generator, and a 7 K.W. two-phase generator, both motor driven, two 9 K.W. rotary converters, two tramway motors mounted for experimental work, a 5 K.W. continuous current motor generator or booster, a 5 K.W. balance set, and motors of various kinds for continuous and alternating current. The electrical plants in other parts of the James Watt Laboratories also provide subjects for experiment. These include a 34 K.W. de Laval steam turbine dynamo, a 30 K.W. high speed engine and dynamo, an electrically driven lift, and motor-driven fan, air pump and centrifugal pump. The instrument room is equipped with the most modern measuring instruments.

As to the Degrees of B.Sc. and D.Sc. in Engineering Science, see Index.

As to the Certificate of Proficiency in Engineering Science, see Index.

As to the Muir Bursaries, the Metcalfe Bursaries, the Dr. Strang Bursaries, the George Young Bursary, the Walker Prizes, the George Harvey Prize, the James Watt Scholarship, and the Lindsay Burnet Medal in the Department of Civil Engineering and Mechanics, see Index.

XI. MINING.

THEORY AND PRACTICE OF MINING.

On 26th March, 1902, James S. Dixon, LL.D., Fairleigh, Bothwell, recognising the want of a means of teaching the higher branches of the Theory and Practice of Mining, and the desire for acquiring such knowledge displayed by many young men connected with mining, made an offer of £10,000 to found a Chair or Lectureship of Mining in the University of Glasgow. The University Court accepted the offer, and a Lectureship has accordingly been founded. The Lecturer is appointed by

a special body consisting of (1) the members of the Court, (2) the President of the Mining Institute of Scotland, (3) His Majesty's Inspector of Mines for the Western District of Scotland, (4) His Majesty's Inspector of Mines for the Eastern District of Scotland, (5) the President of the Lanarkshire Coal-masters' Association, and (6) the Donor during his life or till his resignation. The appointing body has the power at the expiry of the first five years from the institution of the Lectureship, and at the expiry of every five years thereafter, to revise and alter the scope of the Lectureship and the duties of the Lecturer.

Lecturer—1902. CHARLES LATHAM, M.Inst.M.E.

The courses in mining are held in the James Watt Engineering Laboratories, and extend throughout the winter session. Arrangements have been made for a limited number of students to obtain practical experience, during the summer months, at some of the largest and best equipped collieries in Scotland.

Under the Coal Mines Regulation Act (1887), Amendment Act (1903), both the Degree of B.Sc., and Certificate of Proficiency, in Mining Engineering are now recognised by the Home Office as equivalent to two of the five years' practical training necessary to qualify as a mine manager.

MINING ENGINEERING.

CLASS I.—Mondays and Wednesdays at 3 P.M. Subjects:—Prospecting, Boring, Sinking, Winding and Ventilation.

CLASS II.—Tuesdays and Thursdays at 3 P.M. Subjects:—Explosives, Haulage, Pumping, Lighting, Timbering, Coal Cutting Machinery, and Surface Arrangements.

CLASS III.—Fridays at 3 P.M. Subjects:—Methods of working Coal and Metalliferous Mines.

As to the degree of B.Sc. in Mining Engineering, and the Certificate of Proficiency in Mining Engineering, see Index.

EVENING CLASSES.

For the benefit of those students who do not wish to take the degree, a similar course to the above will be given in the evening as follows: Class I., Mondays and Wednesdays at 6.30 P.M.; Class II., Tuesdays and Thursdays at 6.30 P.M.; Class III., Tuesdays at 7.30 P.M.

MINE MANAGEMENT.

This course is intended for students who wish to qualify as mine managers under the Coal Mines Regulation Act, and extends over two years.

CLASS I.—Mondays at 7.30 P.M. Subjects :—Boring, Sinking, Explosives, Winding, and Ventilation.

CLASS II.—Wednesdays at 7.30 P.M. Subjects :—Methods of Working, Haulage, Pumping, Lighting, Timbering, Coal Cutting Machinery, and Surface Arrangements.

XII. NAVAL ARCHITECTURE, INCLUDING MARINE ENGINEERING.

The John Elder Chair of Naval Architecture was founded by the University in 1883. An endowment of £12,500 was provided by the late Mrs. Elder, widow of Mr. John Elder, engineer and shipbuilder, Glasgow. The Professor is appointed by the University Court.

Professors.

1883. Francis Elgar, LL.D. | 1886. Philip Jenkins.

1891. JOHN HARVARD BILES, LL.D.

The courses of the Professor comprise a Junior Course of Lectures and Examinations upon Naval Architecture and Marine Engine and Boiler Design, and a Senior Course of Lectures and Examinations upon Naval Architecture and Marine Engine Design ; also a Junior and a Senior Course of Instruction in Ship Drawing and Calculations and Marine Engine Drawing and Design. The Junior Course of Lectures and Examinations may be taken in either the first or the second year of the regular curriculum, and the classes will meet on Mondays, Wednesdays, and Fridays at 12 noon, or at any other hour that may be found convenient. The classes of the Senior Course will be held on Mondays, Tuesdays, and Thursdays from 11 A.M. to 12 noon, or at any other hour that may be found convenient.

The Junior Course of Instruction in Ship Drawing and Calculations and Marine Engine Drawing and Design is expected to be taken by students in the first year of the regular curriculum ; and the classes will be held on Tuesdays, Wednesdays, Thursdays, and Fridays from 2 P.M. to 5 P.M., or at

any hour that may be found convenient. The classes of the Senior Course will be held on Tuesdays, Wednesdays, Thursdays, and Fridays from 2 P.M. to 5 P.M., or at any other hour that may be found convenient.

As to the Degree of B.Sc. on the side of Naval Architecture and Marine Engineering, see Index.

As to the Lloyd's Register Scholarship, and the Kirk Memorial Prize, see Index.

XIII. PUBLIC HEALTH.

(See under Faculty of Medicine, p. 118).

III.—FACULTY OF MEDICINE.

The Faculty of Medicine embraces the Classes of Botany, Zoology, Physics, Chemistry, Anatomy, Embryology, Physiology, Materia Medica, Pathology, Forensic Medicine, Surgery, Clinical Surgery, Practice of Medicine, Clinical Medicine, Midwifery, Insanity, Diseases of the Eye, Diseases of the Ear, Diseases of the Throat and Nose, Diseases of the Skin, and Diseases of Children.

ORDER OF STUDY RECOMMENDED.

It is advantageous that the Student should commence his studies in Summer. Candidates are advised not to go up for examination in Chemistry and Zoology till the Autumn before the Second Winter.

1ST SUMMER.—Physics, Botany.

1ST WINTER.—Chemistry, Junior Anatomy, Zoology. Practical Zoology may also be taken. Practical Chemistry in Laboratory may also be taken if desired.

2ND SUMMER.—Practical Anatomy, Embryology. Practical Chemistry may be taken if not already attended.

2ND WINTER.—Senior Anatomy, Physiology, Practical Anatomy.

3RD SUMMER.—Practical Anatomy, Practical Physiology, Practical Pharmacy, Clinical Surgery and Hospital.

3RD WINTER.—Surgery, Materia Medica, Clinical Surgery, Hospital and Dispensary Practice.

4TH SUMMER.—Practical Pathology, Medical Jurisprudence and Public Health, Operative Surgery, Clinical Medicine and Hospital.

4TH WINTER.—Pathology, Practice of Medicine, Midwifery, Also Clinical Class and Hospital.

5TH SUMMER.—Insanity, Diseases of Women, the Skin, the Eye, the Ear, the Throat and Nose, Vaccination, Hospital, Fevers.

5TH WINTER.—Hospital, Midwifery Practice, and Specialities of Practice not previously attended to.

A. The subjects of the *First Professional Examination* for the Degrees of Bachelor of Medicine and Bachelor of Surgery are taught in the following classes:—

I. BOTANY.

The subject of Botany was from 1718 conjoined with Anatomy. The combination being found unsuitable, a separate Lectureship on Botany was instituted, and ultimately, in 1818, the Professorship was founded. The appointment is vested in the Crown. (See p. 201, as to Botanic Garden.)

Professors.

1818. Robert Graham, M.D.	1845. G. A. Walker-Arnott, LL.D.
1820. Sir W. J. Hooker, LL.D.	1868. Alexander Dickson, M.D.
1841. John H. Balfour, M.D.	1879. I. B. Balfour, M.D., D.Sc.
1885. FREDERICK O. BOWER, Sc.D., F.R.S.	

Lectures are given at the University every Tuesday, Wednesday, Thursday, Friday, and Saturday at 8 A.M., during the summer session. On Saturdays, according as the season and the weather permit, either excursions are made for the study of plants in the field, or microscopic demonstrations are given in the Laboratory.

Demonstrations on fresh specimens are given in the Botanic Garden or at the University during the latter part of the session.

The Botanical Laboratory at the University is open daily from 9 A.M. to 4 P.M. from the end of April to the middle of July. Classes for elementary practical work in the Botanical Laboratory are formed during these months at hours, so far as practicable, to suit the convenience of students.

A course of Advanced Lectures, as well as a more extended course of Practical Instruction, designed for candidates for the Degree of M.A., the Science Degree, or other more advanced students, is given in the Laboratory during the winter session. Notice of times of meeting of these classes will be given in due course.

A course of Instruction in Botany, specially designed for Teachers in Training has been given during the summer session. This course was not a qualifying course for any curriculum, but it was suitable for those who wished to study the elements of Botany without a view to graduation.

The University Herbarium may be consulted by students on applying to the Professor.

Students in the Botanical Class may obtain, by applying to the Professor, specimens of plants from the Botanic Garden for private study.

For the "Dobbie Smith" Gold Medal, see under "Prizes."

II. ZOOLOGY.

This Professorship, under the name of Natural History, was founded by George III. in 1807. It originally comprehended both Zoology and Geology, but when the Chair of Geology was founded in 1903 by the University Court Ordinance No. viii., it was provided that the Chair of Natural History should thenceforth be called the Chair of Zoology. The Professor is appointed by the Crown.

Professors.

1807. Lockhart Muirhead, LL.D.	|	1857. Henry D. Rogers, LL.D.
1829. Wm. Couper, M.D.	|	1866. John Young, M.D.
1902. J. GRAHAM KERR, M.A.		

Senior Assistant—Edward J. Bles, B.A., B.Sc.

Lectures on Zoology, including Comparative Morphology, are given daily at 9 A.M. throughout the Academical year.

The first 50 Lectures of the Course are introductory in their nature. In these Protozoology is treated in considerable detail while the more important groups above the Protozoa are treated in outline, special attention being devoted to such as are of general zoological interest, and to such as are, from their

parasitic habits or otherwise, of special importance to the Student of Medicine. Details of the anatomy of the higher Vertebrates are not dealt with.

In connection with this part of the Course, a Laboratory Class in Elementary Practical Zoology will be held daily from 11 to 1, and, if necessary, repeated in the afternoon from 3 to 5. In this class Students will examine for themselves examples of the main groups treated of in the systematic lectures.

During the latter half of the Winter and during the Summer Session Lectures of a less elementary character will be given suitable for candidates for degrees in Science. During the summer session the lectures will deal with the Comparative Anatomy and Embryology of the Vertebrata. During the latter half of the winter session the lectures will deal with two or more of the Phyla of the Invertebrata, and also with certain of the general problems of Zoology.

Practical work will be arranged at suitable hours to illustrate the Lectures, and that in connection with the Summer Course will be of such a nature as to give Students an introduction to the methods of Laboratory technique.

The Zoological collections in the Hunterian Museum, though not yet adapted to teaching purposes, are open free to students.

Text-books for Elementary Class: Shipley & MacBride, *Zoology*; Marshall & Hurst, *Practical Zoology*.

For the Millport Marine Biological Station, see p. 202.

III. PHYSICS.

(See under Natural Philosophy in Faculty of Arts, p. 87.)

IV. CHEMISTRY.

This Professorship was founded by George III. in 1817, previous to which time (from 1747) there were Lecturers on Chemistry appointed by the University. The Professor is appointed by the Crown.

Lecturers.

1747. William Cullen, M.D.	1769. William Irvine, M.D.
1756. Joseph Black, M.D.	1787. Thomas C. Hope, M.D.
1766. John Robison, LL.D.	1791. Robert Cleghorn, M.D.

Professors.

1818. Thomas Thomson, M.D. | 1852. Thomas Anderson, M.D.
1874. JOHN FERGUSON, M.A., LL.D., F.S.A.

Assistants.

T. S. Patterson, Ph.D. | Charles E. Fawsitt, D.Sc., Ph.D.
James Roberts, F.C.S.

SYSTEMATIC CHEMISTRY.—The Lectures are delivered daily at 10 A.M. during the winter session. They treat of the general principles of Chemical Philosophy and the preparation and properties of the Non-Metallic and the principal metallic elements and their compounds. The latter part of the course is devoted to the elements of Organic Chemistry.

Attendance on this course qualifies for Degrees in Arts and Medicine and for the First Examination for Degrees in Science.

Tutorial Classes.—Students desiring to obtain a qualifying certificate for Degrees in connection with the systematic course are required to give attendance at one of the Tutorial Classes, each of which meets twice a week. The teaching in these classes is supplementary to that given in the systematic lecture course, and is given partly by means of oral examination and written exercises in Chemical Arithmetic.

Written examinations of the whole class are held at intervals during the session.

HIGHER COURSES.—Short courses on Metallurgical, Physical and Organic Chemistry are given during the winter and summer sessions, and to meet the requirements of Ordinance No. 12, Section IX. (4) (p. 239), a higher course will be delivered as required. It will deal with the Rare Elements, Theories of Chemistry, and the History of Chemistry.

CHEMICAL LABORATORIES.—The Laboratories are open daily (except Saturday) from 10 A.M. to 4 P.M. Junior students go through a course of inorganic preparations and qualitative analysis suitable for those proceeding to degrees in Medicine and Arts and to the First Examination for Degrees in Science. Medical students are required to spend at least two and a half hours a day at practical work. Those intending to proceed to the degree in Arts or to the first examination for a degree in Science are recommended to attend for 3-3½ hours per day during a half session or to take a full session course.

Senior students go through a course consisting of quantitative analysis including the analysis of gases, exercises in physical and electrochemistry, and organic analysis and preparations. One whole session (or two half sessions) of attendance at the laboratory, after completion of the qualifying course for the first B.Sc. Examination, is required of candidates proceeding to the Final Examination in Chemistry for B.Sc., but students are strongly advised to spend a further period before attempting the Examination.

For work to be professed by Candidates for Degree Examinations in Chemistry see pp. 230, 241.

POST-GRADUATE STUDY AND RESEARCH.—Arrangements are made for graduates and others engaging in original investigation in Organic, Physical and Metallurgical Chemistry. Particulars regarding scholarships, fellowships and bursaries tenable in the chemical laboratories may be obtained from the *Calendar*, pp. 420, 421. Those intending to take advantage of the arrangements during next session should make timely application to the Professor.

ORGANIC CHEMISTRY. *Lecturer*—T. S. Patterson, Ph.D. Two courses of Lectures on Elementary Organic Chemistry are given.

1. *An Elementary Course of 25 lectures during the latter part of the Winter Session.*

This course is suitable for students taking the First Science Examination, for medical students, or for others who wish to attend a systematic course in Organic Chemistry without working up to the standard of Final B.Sc. in Chemistry.

The lectures are fully illustrated by experiments, and deal with the following subjects:—Methods of Analysis, Deduction of Formulæ, Classification of Organic Compounds, and the Chemistry of the following classes of substances—Aliphatic hydrocarbons, halogen derivatives, alcohols, ethers, aldehydes, ketones, acids, esters, amines, amides, and a few of the more common aromatic compounds.

2. *An Elementary Course of 20 lectures during the Summer Session.*

This course, which is more particularly intended to meet the requirements of medical students, is only held provided a

sufficient number come forward. The subject is treated much as in the winter course.

Books recommended:—Perkin & Kipping, *Organic Chemistry*, Part I.; Cohen, *Theoretical Organic Chemistry*. For a more advanced course see Faculty of Science, p. 91.

METALLURGICAL CHEMISTRY.

(See Faculty of Science, p. 92.)

PHYSICAL CHEMISTRY.

(See Faculty of Science, p. 93.)

B. The subjects of the *Second Professional Examination* for the Degrees of Bachelor of Medicine and Bachelor of Surgery are taught in the following classes:—

I. ANATOMY.

This Professorship, with which Botany was at first associated, was founded in 1718 by the Crown and University jointly. After 1818 the province of the Chair was restricted to Anatomy.

Professors.

1720. Thomas Brisbane, M.D.	1781. William Hamilton, M.D.
1742. Robert Hamilton, M.D.	1790. James Jeffray, M.D.
1756. Joseph Black, M.D.	1848. Allen Thomson, M.D.,
1757. Thos. Hamilton, M.D.	LL.D., F.R.S.
1877. JOHN CLELAND, M.D., LL.D. (St. A. and Ed.), D.Sc., F.R.S.	

University Assistant.

James F. Gemmill, M.A., M.D., C.M.

Lecturer on Regional Anatomy and Senior Demonstrator.

William K. Hutton, M.A., M.B., C.M.

Demonstrator.

Archibald N. M'Lellan, M.B., C.M.

In the WINTER SESSION Anatomical Instruction is conducted in the following courses, viz.:—

1. ELEMENTARY DESCRIPTIVE LECTURES.—This class meets on five days weekly from 1 to 2 o'clock. The Lectures com-

prehend a full systematic description of the Bones, Joints, Muscles and Muscular Organs, and a general view of the Nervous System and Viscera.

2. **ADVANCED DESCRIPTIVE LECTURES AND DEMONSTRATIONS.**—This class meets on six days weekly from 11 to 12 o'clock, viz., on five days for Lecture, and on Saturday for Microscopical Demonstrations. The course comprehends: 1st, Demonstrations of Regional or Topographical Anatomy, including the Distribution and Relations of the Blood-vessels and Nerves; 2nd, Histology and a Detailed Description of the Viscera, Brain, and Organs of Sense.

3. **PRACTICAL ANATOMY.**—This class is under the superintendence of the Professor and Demonstrators. The dissecting room is open from 9 A.M. to 4.45 P.M. daily, except on Saturdays, when it is closed at mid-day.

Text-books.—Cleland and Mackay, *Human Anatomy*; Cleland and Mackay, *Directory for Dissection*. Also, Spalteholz, *Handatlas of Human Anatomy*, or Toldt, *Atlas of Human Anatomy*, will be found a valuable and convenient auxiliary.

In the **SUMMER SESSION** the rooms for Practical Anatomy are open from 8 A.M. to 3 P.M. daily.

EMBRYOLOGY.

A Lectureship on Embryology was instituted by the University Court in 1894, but the first Lecturer, Dr. John Yule Mackay, having resigned before the beginning of the second session, temporary arrangements were made for carrying on the work of the class in 1895 and 1896.

Lecturers.

1894. John Yule Mackay, M.D.

1897. JAMES F. GEMMILL, M.A., M.D.

The *Systematic Class* meets in the Anatomy Class-room at 11 A.M. on Mondays, Tuesdays, Thursdays, and Fridays of the summer session. The course deals with Vertebrate, and specially with Human Development, a certain amount of General Embryology being also included in the earlier lectures.

A *Practical Class* in Embryology is also held in the Summer Session. The course includes:—

I. Instruction in the methods of Embryological research.

II. Practical Study of:—(a) Maturation, fertilisation, segmentation etc. (Echinoderm material most suitable). (b) The development of one or more of the following types,—(1) Cartilaginous fish, (2) Amphibian, (3) Chick. (c) Mammalian development with reference to the foetal membranes, placenta and uterus, especially in the human subject.

III. Such advanced lectures as may from time to time be necessary in order to illustrate the bearing of any part of the practical work on Comparative Embryology.

Competent workers will be given facilities for carrying out special researches.

The Laboratory will be open from 9 A.M. till 3 P.M. except on Saturdays when the hour of closing is 12 noon.

II. PHYSIOLOGY.

This Professorship was founded by Her Majesty, Queen Victoria, in the year 1839, under the name of Theory of Physic. It was subsequently known as Institutes of Medicine, and is now, in accordance with Ordinance No. 31 of date 5th June, 1893, designated Physiology.

Professors.

1839. Andrew Buchanan, M.D.

1876. JOHN GRAY M'KENDRICK, M.D., LL.D., F.R.S.,
F.R.S.E., F.R.C.P.E.

I. SYSTEMATIC LECTURES.

The Lectures of this course are delivered daily at 12 noon during the winter session. They are devoted to an exposition of the main principles and facts of the Physiology of Man.

1. *General Physiology*, which includes a description of the functions of the various tissues, and of the chemical reactions which occur in the living body.

2. *Special Physiology*, or the functions of organs and systems of organs. This division of the subject includes (1) nutrition, (2) animal movements, (3) innervation, and (4) reproduction.

Examinations are held during the session.

II. PRACTICAL PHYSIOLOGY.

During the *summer session* Practical Instruction is given in the Laboratory by the Professor, the Muirhead Demonstrator, and Assistants, to classes of not more than thirty-five students in each class, at such hour or hours as may be found convenient. The hours selected are 8 to 9 A.M. and 12 noon to 1 P.M. daily, except Saturday. This course includes :—(1) Instruction in the use of the microscope, and in the microscopical examination of the various tissues with the aid of modern methods of hardening, staining, cutting, and mounting preparations. (2) The analysis of the principal fluids of the body, with special reference to the physiological processes by which they are produced. Students will have the opportunity of acquiring information which cannot readily be communicated in systematic lectures.

III. ADVANCED CLASS OF PRACTICAL PHYSIOLOGY.

This Class is intended to meet the requirements of candidates for the Degree of B.Sc. It will meet during the winter session at a suitable hour, on two or three days weekly, and the course will comprise fifty meetings each of at least two hours duration. Students will be taught (*a*) the more advanced methods of Physiological Chemistry, (*b*) special methods in advanced Histology, and (*c*) the use of physiological apparatus, the experimental investigation of the properties of muscle and nerve, the physics of the circulation, and the physiology of the senses. This course is wholly practical, and is designed to supplement the instruction given in the ordinary class of Practical Physiology, and to lead the student into the higher departments of physiological science.

IV. THE LABORATORY.

The Laboratories are open daily from 10 A.M. to 4 P.M., under the superintendence of the Professor, to whom application should be made by those who may wish to pursue original investigation. It is furnished with the most modern appliances both for research and for the illustration of Lectures on Physiology.

Text-books: For the Systematic and Practical Classes—M'Kendrick, *Text-book of Physiology*, 2 vols.; Halliburton, *Text-book of Physiology*.

V. SPECIAL COURSES FOR B.SC. IN PURE SCIENCE.

It is in contemplation to institute short courses of lectures to meet the requirements of candidates who offer Physiology in the Final Examination for the Degree of B.Sc. in Pure Science. The subjects will be varied from year to year, and will be dealt with more fully than is possible in the systematic course for medical students.

In the winter session, 1906-7, will be given a course of twenty-five lectures on the Physiology of Nerve and Muscle.

The laboratory for experimental physiology will be available for special research on the same terms as those specified in the *Calendar* for Physics and Chemistry.

Text-books and books of reference:—M'Murich, *Development of the Human Body*; Schäfer, *Text-book of Physiology*; Ferrier, *Functions of the Brain*; Biedermann, *Electro-Physiology*; Halliburton, *Bio-chemistry of Muscle and Nerve*.

VI. GRIEVE LECTURESHIP ON PHYSIOLOGICAL CHEMISTRY.

The course of lectures for the Winter Session 1906-7 will deal with the chemistry of metabolism, with special reference to the products of excretion.

This course may be regarded as an extension of the physiological chemistry taught in the advanced practical class, and will deal with the higher aspects of the subject. The lectures will be illustrated, as far as possible, by means of experiments.

The laboratory for physiological chemistry will be available for special research on the same terms as those specified in the *Calendar* for Physics and Chemistry.

As to the Muirhead Demonstratorship of Physiology, see p. 150. As to the Grieve Lectureship in Physiological Chemistry, see p. 151.

III. MATERIA MEDICA.

A Lectureship on this subject was founded by the College in 1766, and a Professorship created by the Crown in 1831.

Lecturers.

1766. William Irvine, M.D.	|	1788. Robert Cleghorn, M.D.
1787. Thomas C. Hope, M.D.	|	1791. Richard Millar, M.D.

Professors.

1831. Richard Millar, M.D.	1865. John B. Cowan, M.D.
1833. John Couper, M.D.	1880. Matthew Charteris, M.D.
1855. John A. Easton, M.D.	1897. RALPH STOCKMAN, M.D.

In the courses of instruction and in the scheme of professional examinations prescribed by Ordinance No. 14, the subjects included in the province of this chair comprise the two branches of *Materia Medica* and *Therapeutics*. In the summer course of *Practical Pharmacy*, which it is advisable to take before the winter course, attendance at twenty-five meetings of the class is required. Instruction is given in compounding official preparations, in writing prescriptions, and in dispensing, supplemented by demonstrations of the more important substances in the *British Pharmacopœia*. The winter course is devoted to *Pharmacology* and *Therapeutics*, the official drugs of the *British Pharmacopœia* being systematically considered in relation to their actions and applications in disease. In addition, lectures are given on the therapeutical aspects of *Dietetics*, *Mineral Waters* and *Baths*, *Electricity*, *Massage*, etc.

Text-books.—The manuals of *Pharmacology* by W. E. Dixon, and of *Materia Medica and Therapeutics* by Dr. Hale White, Dr. Mitchell Bruce, and Dr. Whitla; *Text-Book of Materia Medica* by Dr. C. R. Marshall; *Practice of Medicine*, by Dr. M. Charteris; *Dictionary of Treatment*, by Dr. Whitla. More advanced books are: *Therapeutics*, by Dr. H. C. Wood; *Text-book of Pharmacology and Therapeutics*, edited by Dr. Hale White; and *Text-book of Pharmacology*, by Dr. A. R. Cushny.

C. The subjects of the *Third Professional Examination* for the Degrees of Bachelor of Medicine and Bachelor of Surgery are taught in the following classes :—

I. PATHOLOGY.

This Chair was founded by Ordinance No. 29 of the Universities Commission (1889) of date 5th June, 1893. The patronage is vested in seven Curators, of whom four are nominated by the University Court and three by the Directors of the

Western Infirmary. By agreement with the Western Infirmary, full accommodation and facilities for teaching are provided for the University in the Pathological Institute recently erected at the Western Infirmary. By mutual arrangement the Professor is the Pathologist to the Infirmary, and the whole material of that institution is available for teaching purposes.

Before the founding of the Chair, Pathology had been taught by Dr. Joseph Coats, who was appointed Lecturer in 1890, and who also held the office of Pathologist to the Western Infirmary.

Professors.

1894. Joseph Coats, M.D.

1899. ROBERT MUIR, M.A., M.D.

First Assistant—John Hammond Teacher, M.A., M.D.

Second Assistant—John Shaw Dunn, M.B., Ch.B.

Demonstrator—Leonard Findlay, M.D., Ch.B.

The course in Pathology and Practical Pathology extends over a summer and winter session. Students are requested to observe that the course starts in summer, and are recommended not to commence their pathological studies in winter.

In the summer session the class meets for two hours on four days each week. About fifteen lectures of an hour each are given on those subjects of General Pathology which can be conveniently illustrated by histological work, *e.g.*, the degenerations, inflammation, the processes of repair, tumours, etc., and the students thereafter prepare and examine sections of tissue illustrating the subjects of the lectures. The Special Pathology of one or two systems, *e.g.*, the circulatory and respiratory are treated in a corresponding manner. Demonstrations of Pathological Anatomy are also given. The methods of Bacteriology are taught in small classes of about twenty students.

In the winter session the class meets for an hour daily. There will be (*a*) lectures with demonstrations on general pathology, including the disturbances of the circulation, the general pathology of infection, fevers, etc., (*b*) lecture demonstrations on Tuesdays and Fridays on special pathology. Students who have already attended a full course in pathology may attend these on payment of a fee of £1 1s. (*c*) Meetings

for practical work in special histology and bacteriology. Of these there will be about thirty. Tutorial classes are also held during the Session.

The Museum of the Western Infirmary is open to all Infirmary students, and a printed catalogue is provided. The post-mortem examinations, which are conducted from 10 A.M. onwards, are also open to the students. Each student during his curriculum must attend at least twenty post-mortems, and must produce evidence that he has received instruction in the methods of post-mortem examination.

Post-graduate or Laboratory Courses in Practical Pathology and Bacteriology are held in October. These courses are open also to senior students. Particulars may be obtained from the Professor.

Text-books.—A *Manual of Pathology* by Dr. Joseph Coats, or a *Text book of Pathology* by Hektoen and Riesman; *Practical Pathology* by Dr. G. Sims Woodhead; and a *Manual of Bacteriology* by Drs. Muir and Ritchie.

The following works are also recommended: Cohnheim, *Lectures on General Pathology*; Thoma, *Handbook of General Pathology*; and Metchnikoff, *Comparative Pathology of Inflammation*.

II. FORENSIC MEDICINE.

This Professorship was created by the Crown in 1839.

Professors.

1839. Robert Cowan, M.D. | 1841. Harry Rainy, M.D.
 1872. Pierce Adolphus Simpson, M.A. (Cantab.), M.D.
 1898. JOHN GLAISTER, M.D., D.P.H. (Camb.), F.C.S., F.R.S.E.

This class will meet daily from 11 to 12 during the summer session.

The Lectures on Forensic Medicine will, as far as possible, elucidate the application of every branch of Medical Science to the purposes of the law.

In the department of Public Health special attention will be given to the subjects of Air, Ventilation and Heating, Water, Injurious Trades, Law respecting Infectious Diseases, Disinfection, Disposal of Sewage and Refuse, and Sanitation in general.

During the session students will have an opportunity of visiting, along with the Professor or his assistant, the most important

public institutions and works in the district dealing with Disposal of Sewage and Refuse, Disinfection, Ventilation, etc.

Demonstrations, macroscopic and microscopic, will be given frequently during the session, illustrating, as far as possible, the whole range of Forensic Medicine and Public Health.

Written and oral examinations (attendance on which is compulsory) will be held at intervals.

In addition, facilities will be given for studying Practical Toxicology in the Medico-Legal Laboratory at the University.

Text-books (for Class of Medical Jurisprudence and Public Health).—Guy and Ferrier, *Principles of Forensic Medicine*; Dixon Mann, *Manual of Medical Jurisprudence*; Hofmann, *Atlas of Legal Medicine* (English edition, 1898); Glaister, *Text-book of Forensic Medicine, Toxicology, and Public Health*, 1902; Glaister, *Manual of Public Health for Students, etc.* (2nd edition, 1905).

PUBLIC HEALTH.

This class will meet four days weekly during the winter session at 12 noon. The lectures will deal with the Sanitation of Dwellings, Medicine in its relation to Public Health, Vital Statistics and Statistical methods, Sanitary Law, etc. (see Ordinance for Degrees in Public Health, p. 256). The subjects under consideration will, as far as possible, be illustrated by demonstrations, visits to public institutions and public health works in Glasgow and neighbourhood, and by other means. The number of meetings of the class is seventy-five. The class is open, after matriculation and payment of the class fee, to Candidates for the Diplomas in Public Health of the Universities of Cambridge, Oxford, and Durham, and of the English, Scottish, and Irish Colleges. According to the Regulations of the General Medical Council, attendance thereat will be accepted in lieu of the second three months' attendance at the office of a recognised Medical Officer of Health for Practical Sanitation.

Text-books—Balfour and Lewis, *Manual of Hygiene and Public Health*; Parkes and Kenwood, *Manual of Hygiene and Public Health*; Glaister, *Text-book of Forensic Medicine and Public Health*; Robertson and Porter, *Sanitary Law and Practice*; Hime, *Sanitary Law*; Local Government Board for Scotland, *Instructions, Forms, etc., to Local Authorities*.

LABORATORY INSTRUCTION IN PUBLIC HEALTH.—The Public Health Laboratory is under the personal supervision of Professor Glaister and his assistant, and is open from 10 a.m. to 4 p.m., daily, for practical instruction in the methods of analysis of air, water, soils, foods, and the detection of adulterations; and for instruction in practical meteorology, sanitary appliances, physics, and practical bacteriology, in relation to public health.

Air.—Estimation of carbonic acid, by Pettenkofer's and other methods; detection and examination of gaseous impurities; estimation of organic impurity by ammonia and Carnelly's process; microscopic examination of matters in suspension; estimation of humidity, dew-point, and tension of vapour.

Water.—Qualitative and quantitative analysis; microscopical examination of sediments; physical and biological examination; comparison and estimation of value of filtering media and filters; mineral and medicinal waters.

Sewage.—Effects of purification processes; analysis of raw sewage and sewage effluents.

Soils.—Chemical and physical examination.

Foods.—Analysis and detection of adulterants; microscopic examination of food-stuffs; physical, microscopical, and chemical examination of milk; analysis of milk, cream, butter, cheese, and oils used as foods; microscopical examination and chemical analysis of starchy foods, sugars, tea, coffee, cocoa, pepper, etc.; examination of preserved foods and detection of their adulterations.

Disinfectants.—Their valuation and comparison; examination of pigments in articles of attire, wall-papers, and those used in trade.

Bacteriology.—Methods of investigation, cultivation, and transmission; preparation of culture media; bacteriological examination of air, water, foods, blood, earth, etc.; microphotographic processes.

Microscopy.—Examination of food substances; parasites—animal and vegetable; crystalline deposits; micro-organisms.

Meteorological Instruments.—Barometer, thermometers, different kinds; rain gauges; anemometers and manometers; hygrometers, and their different forms.

The Laboratory is furnished with all the necessary chemical apparatus, etc., required for analysis, and each worker is

furnished with a set of apparatus for personally doing the work, and for which he is held personally responsible.

There is a complete collection of model sanitary appliances, including traps; soil stacks; soil pipes; ventilators; meteorological instruments; and an abundant collection of drawings, diagrams, and illustrative tables.

The Laboratory also possesses a large collection of microscopic specimens illustrative of parasites—animal and vegetable—food characteristics, of bacteriology and tropical diseases.

Visits will be made, as arranged, during the Session, to view and inspect modes of disposal of refuse, sewage disposal, unhealthy trades, etc.

The Laboratory instruction is recognized for the Diplomas in Public Health of the Triple Scotch Colleges, of the English Colleges, and of the Universities of Cambridge, Oxford, and Durham, under the new regulations.

Text-books (for Public Health Laboratory). — Lehmann, *Methods of Practical Hygiene* (English edition), 2 vols.; Parkes, *Public Health Laboratory Work*; Pakes, *Public Health Laboratory Work*; Hewlett, *Manual of Bacteriology*, 1898; Muir and Ritchie, *Manual of Bacteriology*, 1903; Slater and Spitta, *Atlas of Bacteriology*, 1898.

N.B.—(See under Faculty of Law, p. 133.)

D. The subjects of the *Final Professional Examination* for the Degrees of Bachelor of Medicine and Bachelor of Surgery are taught in the following classes:—

I. SURGERY.

This Professorship was founded in 1815, and is in the gift of the Crown.

Professors.

1815. John Burns, M.D.	1860. Joseph Lister, M.B., F.R.S.
1850. James A. Lawrie, M.D.	1869. Sir George H. B. Macleod, M.D., LL.D., F.R.S.E.
1892. SIR WILLIAM MACEWEN, F.R.S.	

The Professor delivers during winter a course consisting of systematic lectures, illustrated by diagrams, casts, and pathological preparations, and of frequent demonstrations. There are

three written examinations. The following is a general outline of the course:—Anaesthesia; wounds and their varieties; haemorrhage and its arrest; the phenomena of destruction and repair of tissues; inflammation; surgical bacteriology; infective processes and diseases dependent upon bacteria and their products; neoplasms; injuries, including fractures and dislocations; Regional Surgery.

During summer Operative Surgery is conducted daily, and consists of descriptive instruction by the Professor in the principal operations, and the performance of recognised operations by the students under supervision.

In the course of Clinical Surgery which the Professor conducts both winter and summer at the Western Infirmary, as part of the regular Clinical Instruction given to University students, practical instruction is given in the methods of clinical observation, surgical diagnosis and treatment. The Professor also takes occasion, as far as the material is available, to draw the attention of the students to the points illustrative of the principles taught in the systematic course.

II. CLINICAL SURGERY.

This Professorship was founded by the University in May, 1874. The Professor is appointed by the University Court.

Professors.

1874. George Buchanan, M.A., M.D., LL.D.

1900. SIR HECTOR C. CAMERON, M.D., C.M.

Assistant.

Alfred A. Young, M.A., M.B., C.M.

The Professor teaches Clinical Surgery by "Lectures and other instruction" on the cases of patients affected with injuries, diseases, etc., requiring Surgical treatment.

The class meets daily at 9.15 A.M., both in the summer and winter session, in the Western Infirmary—Wards XIII., and XIX.; and in the Overtoun Theatre.

III. PRACTICE OF MEDICINE.

This Professorship, created in 1637, but long suppressed for want of revenue, was revived by the College in 1712, and

endowed by Queen Anne in the following year. It is in the gift of the Crown.

Professors.

1714. John Johnstoun, M.D.	1827. Charles Badham, M.D.
1751. William Cullen, M.D.	1841. William Thomson, M.D.
1756. Robert Hamilton, M.D.	1852. John M'Farlane, M.D.
1757. Joseph Black, M.D.	1862. Sir W. T. Gairdner,
1766. Alex. Stevenson, M.D.	K.C.B., M.D., LL.D., F.R.S.
1789. Thomas C. Hope, M.D.	1900. SIR THOMAS M'CALL
1796. Robert Freer, M.D.	ANDERSON, M.D.

The course is directed to the exposition of the Healing Art in its more practical aspects, having regard to the immensely wide range of diseases usually assigned to the physician and the general practitioner, as opposed to the surgeon and the specialist. The general principles and doctrines which are available at the bedside of the sick are each year carefully and thoroughly considered in connection with such a number and variety of illustrative instances as may be expected to leave a lasting and vivid impression of the essentials of Diagnosis, Prognosis, and Treatment, in so far as these can be advantageously delivered in the form of lectures guided by a systematic plan, conveying not only the opinions of the Professor, but also references to the general history of opinion, and the steps by which the existing knowledge of disease has been built up. Thus, a broad and sufficient basis is obtained for conveying an insight into what may now be regarded as settled medical doctrine, and also, as regards points which cannot be so considered, suggestions as to the direction in which we may reasonably look for guidance in the future. But no attempt is made to give a complete synopsis annually of the details of practice in all departments; for this, the student is of necessity referred to one or other of the current text-books. In summer there is a tutorial class twice a week, open, without fee, to those who have attended the Practice of Medicine class in a previous winter session.

The Professor conducts at the Western Infirmary, both in winter and in summer, part of the regular Clinical Instruction given to the Medical Students of the University.

Tutorial Instruction is carried out by the University Assistants twice a week in the University and three times a week in the Western Infirmary, and three written examina-

tions are held in the course of the winter session. Medals and certificates of distinction are determined upon the basis of these examinations.

A portrait-medal of Sir William T. Gairdner, K.C.B., is awarded to the most distinguished student in the class of Practice of Medicine. The dies for this medal were presented to the University along with a Portrait of the Professor by his former students, on 28th January, 1893.

Text-books.—One of the following is recommended for general use:—Frederick Taylor, *Manual of the Practice of Medicine*; or Osler, *Principles and Practice of Medicine*; Hilton Fagge's *Principles and Practice of Medicine* is a larger work of great excellence, specially adapted for senior students. Of smaller works the second edition of Wheeler's *Handbook of Medicine*, edited by Dr. William R. Jack, is useful for junior students. Finlayson's *Clinical Manual* is in very general use for hospital work, and Professor Anderson's *Contributions to Clinical Medicine* may be consulted.

IV. CLINICAL MEDICINE.

This Professorship was founded by the University in May, 1874. The Professor is appointed by the University Court.

Professors.

1874. Thomas M'Call Anderson, M.D.

1900. SAMSON GEMMELL, M.D.

Assistant.

James C. M'Clure, M.B., C.M.

The class meets five days a week during the winter and summer sessions, and three or four written examinations are held. On Mondays and Thursdays the Professor gives demonstrations of cases in the wards; and on Wednesdays there is a clinical lecture in the theatre on cases under observation. The clinical tutors meet the class (in sections) on Tuesdays and Fridays for instruction in the investigation of cases and in the use of instruments and apparatus. A ward visit is made by the Professor every day at the close of the regular instruction.

V. MIDWIFERY.

This subject was originally taught as part of the course in Anatomy, but in 1790 the Faculty of the College appointed

Mr. James Towers to be Lecturer in Midwifery, and in 1792 assigned him a salary out of the Walton Fund. In 1815 the Chair was founded by George III., and Mr. Towers became the first Professor. The Crown is the Patron.

Professors.

1815. James Towers, C.M.	1834. William Cummin, M.D.
1820. John Towers, C.M.	1840. John M. Pagan, M.D.
1833. Robert Lee, M.D.	1868. William Leishman, M.D.
1894. MURDOCH CAMERON, M.D.	

The Lectures embrace the Theory and Practice of Midwifery and the Diseases of Children. The Professor was Physician to the University Lying-in Hospital and Dispensary, an institution which was many years ago established in the neighbourhood of the old College. The altered circumstances of the school having, however, rendered this situation unavailable for Clinical instruction, other arrangements have now been made by which the Managers of the Western Infirmary have placed a ward for the Diseases of Women under the charge of the Professor. Ample opportunity is afforded for Clinical instruction in Midwifery at the Glasgow Maternity Hospital, to which the Professor holds the appointment of Consulting Physician.

A course of lectures on the Diseases of Women is delivered in summer.

E. Candidates for the Degrees of Bachelor of Medicine and Bachelor of Surgery are required also to attend the following courses :—

I. INSANITY.

This Lectureship was instituted by the University in 1880. Great advantages are offered to students for the study of this subject, the Lecturer being Physician Superintendent to the Royal Asylum, Gartnavel.

Lecturer.

1880. David Yellowlees, M.D., LL.D.
1905. LANDEL R. OSWALD, M.B.

A course of Lectures is given in the University at 12 noon

on Wednesdays during the summer session, and Clinical Instruction at the Asylum, Gartnavel, at 10 A.M. on Saturdays.

For the Mackintosh Mental Science Bursary in connection with this class see "Bursaries."

II. OPHTHALMOLOGY.

The practical course of instruction in Ophthalmology must consist of not less than twenty meetings, of which six may be class-room lectures, and the others shall be for clinical instruction. Such courses are available in the Glasgow Eye Infirmary (174 Berkeley Street and 80 Charlotte Street), and in the Glasgow Ophthalmic Institution (126 West Regent Street). In the Berkeley Street branch of the Eye Infirmary attendance is given daily at 1 P.M. and students may attend twice a week the lectures and the clinique of any of the three surgeons. The same rule holds in the Charlotte Street branch. At the Ophthalmic Institution lectures are delivered during the summer session every Monday at 4 P.M., and practical instruction is given on Tuesday and Friday at 2 P.M. In the case of women students lectures are delivered in the summer session by Dr. A. Maitland Ramsay, in Queen Margaret College every Tuesday and Friday at 4 P.M., and practical instruction is given at the Ophthalmic Institution every Monday and Thursday at 2 P.M.

III. FEVERS.

The course of Clinical Instruction in Fevers must consist of at least ten meetings in a hospital for infectious diseases containing not less than fifty beds. Such instruction is given in the City of Glasgow Fever Hospital, Belvidere. Each student must, before commencing attendance at the Hospital, obtain at the office of Mr. James D. Borthwick, Treasurer, Police Department, 285 George Street, an admission card—Fee, £1 1s.

F. Candidates for the Degrees of Bachelor of Medicine and Bachelor of Surgery are also recommended to attend the following courses :—

I. DISEASES OF THE EAR.

This Lectureship was instituted by the University Court in 1895.

Lecturer.

1895. THOMAS BARR, M.D.

Short courses on Diseases of the Ear are conducted in both winter and summer. They are of a practical character, and arrangements are made so that each student who takes the course may, in accordance with the recommendation of the Senate under Ordinance No. 14, Section VII., 10 B, attend at least ten meetings for practical instruction. At these meetings the students are taught how to examine and treat Ear Disease, while illustrative cases are regularly demonstrated. In connection with each course a certain number of lectures are delivered in the University. The practical work is carried on at the Glasgow Ear Hospital or Western Infirmary on days and hours to suit as far as possible the convenience of students. As it is not considered desirable that there should be an elaborate or complete course of systematic lectures on this subject, it is understood that a suitable book on Diseases of the Ear should be studied by the student while attending the practical course. It will be arranged that those who are desirous of pursuing the subject further may receive more advanced practical instruction in a second course.

Prizes will be awarded to the most proficient students as tested by clinical examination.

Text-book.—*Manual of Diseases of the Ear* (3rd Edition, 1901), by Thomas Barr, M.D.

II. DISEASES OF THE THROAT AND NOSE.

This Lectureship was instituted by the University Court in 1895.

Lecturer.

1895. JAMES WALKER DOWNIE, M.B., F.F.P. and S.G.

The course of instruction on Diseases of the Throat and Nose is clinical in character, and is conducted in conformity with the recommendation of the Senate under Ordinance No. 14, Section VII., Sub-section 10 B, according to which candidates for graduation in Medicine are recommended to attend a short practical course of ten meetings on this subject. To permit of the necessary sub-division of the class for purposes of practical instruction there is a winter and a summer course, each having about the same number of meetings.

At the beginning of each session, the class meets as a whole at the University on Thursdays at 4 P.M. There the methods of examining the throat and nose, and the apparatus necessary for this purpose, are described and explained: the appearance of the parts in health and as altered by diseases is described, as are also the means of treatment, etc.

The class is then divided into sections for practical instruction. These sectional meetings are held at the Western Infirmary (Throat and Nose Department)—one section on Tuesdays, another on Fridays, at 4 P.M. At these meetings each student is afforded every facility for examining the various patients for himself under the supervision of the Lecturer.

In the Lectures at the University fuller instruction than can be communicated in the presence of the patient regarding pathological conditions seen at the Infirmary is given, and these lectures are illustrated by casts and diagrams, stereoscopic photographs and lantern slides, instruments, anatomical and pathological specimens, etc. While regular attendance on the practical instruction at the Infirmary is necessary to obtain a certificate, all members of the class are strongly recommended to attend the meetings at the University.

Text-books.—*Clinical Manual of Diseases of the Throat*, by J. Walker Downie, M.B.; *A Handbook of Diseases of the Nose*, by James B. Ball, M.D.

III. DISEASES OF THE SKIN.

The course of instruction on Diseases of the Skin at the Hospital for Skin Diseases is of a thoroughly practical character, and is conducted by Professor Sir Thomas M'Call Anderson during the summer session. Arrangements have been made to supply short practical courses in accordance with the recommendation of the Senate under Ordinance No. 14, Section VII., Sub-section 10. The course commences on Monday, 29th April, 1907.

IV. DISEASES OF CHILDREN.

Arrangements will be made for enabling students to carry out the recommendation of the Senate, that each candidate for Degrees in Medicine should attend a short practical course on this subject.

IV.—FACULTY OF LAW.

The Faculty of Law embraces the Chairs of Law and Conveyancing, and also the Chairs of Forensic Medicine and Political Economy. In this Faculty there are also Lectureships on Civil or Roman Law, Constitutional Law and History, Jurisprudence, Public International Law, International Private Law, Mercantile Law, and Evidence and Procedure.

For the information of students proposing to enter the legal profession, whether as Advocates or as Law Agents, it may be stated that by the regulations of the Faculty of Advocates, every intrant to the Faculty is required to produce evidence of being duly qualified (1) in General Scholarship, and (2) in Law. In General Scholarship the possession of any one of certain University degrees, including the degree of M.A. from a Scottish University, is deemed a sufficient qualification. If the intrant does not hold a qualifying degree he is required to undergo an examination in certain specified branches of General Scholarship, as to which information may be obtained on application to the Clerk of Intrants to the Faculty. On the expiration of a year after the intrant has been found qualified in General Scholarship, his examination in Law may be proceeded with, subject to these conditions: (1) That he shall not during the year before such examination have engaged in any trade, business, or profession, either on his own account, or as assistant to or in the employment of another; and (2) that he shall produce evidence of attendance, such as is required for admission to examination for a Law degree, in a class of Scots Law and a class of Conveyancing, in a Scottish University, and evidence of the like attendance in a class of (a) Civil Law, (b) Philosophy of Law and International Law, Public or Private, (c) Constitutional Law and History in a Scottish University, or such attendance in another University or School of Law as may seem to the Dean and his Council to be equivalent thereto, and (d) Medical Jurisprudence, in a University, or in a School recognised as qualifying for University Degrees. On the production by the intrant of evidence of his having attended the necessary classes (which he may attend in any order he thinks fit), he is examined on (1) Civil Law, (2) Philosophy of Law and International Law, Public or Private, (3) Constitutional Law and History, (4) Medical Jurisprudence,

(5) Scots Law, Civil and Criminal, including Procedure, (6) Conveyancing. Information as to the books prescribed may be obtained from the Clerk of Intrants. If, however, the intrant has obtained the degree of LL.B. from a Scottish University after examination in all the subjects above prescribed for examination in Law, and also produces evidence that he has passed an examination in Procedure, he is held qualified in General Scholarship and Law without examination or other evidence of qualification, subject to the conditions that during the year immediately before presenting his diploma to the Examiners, he shall not have been engaged in any trade, business, or profession, as above set forth, and that he shall have duly presented his petition for admission and appeared before the Examiners prior to the commencement of such year. If the intrant has obtained said degree of LL.B. after passing examinations in one or more of the said subjects he is exempt from examination in these subjects. He must pass in at least two of the subjects at one time. The regulations regarding the "Public Examination," which all intrants, whether graduates or not, must undergo, require that the intrant shall write a Thesis on a Title of the Pandects assigned to him by the Dean, and shall defend it on its being impugned. The question as to the intrant's admission is then decided by the Faculty voting by ballot.

Admission to the profession of a Law Agent is regulated by the Law Agents Act, 1873, and by the Law Agents and Notaries Public Act, 1891, and relative Acts of Sederunt of the Court of Session, prescribing rules as to subjects of examination and certain conditions of admission. Information as to the subjects of examination may be obtained from the Clerk to the Examiners. The former Act requires in general that every applicant for admission must have served an apprenticeship of five years with a practising law-agent or with a sheriff-clerk in office at the passing of the Act, which apprenticeship, if entered upon after the passing of the Act, must be served under indenture, recorded and intimated as the Act requires. In certain cases, however, an apprenticeship for three years is allowed as sufficient, the excepted cases including that of a person holding a degree in Law or in Arts of a University in Great Britain or Ireland granted after examination.

The Act of Sederunt of 18th March, 1893, institutes two examinations in General Knowledge, and prescribes the subjects of these examinations and of the examination in Law. By the Act of Sederunt of 21st November, 1902, in any subject to which the certificates or passes apply a Higher or Lower Grade Leaving Certificate issued prior to 1st June, 1902, or a Leaving Certificate or an Intermediate Certificate issued subsequent to that date, or a Pass in either Higher or Lower Grade granted as a step towards a Leaving Certificate, exempts from the first examination in General Knowledge; and a Higher Grade Leaving Certificate issued prior to 1st June, 1902, or a Leaving Certificate issued subsequent to that date, so far as obtained by passing on the Higher Grade, or a Pass in the Higher Grade granted as a step towards a Leaving Certificate, exempts from the second examination. Higher or Lower Certificates of the Oxford and Cambridge Schools Examination Board afford similar exemptions to Higher or Lower Grade Leaving Certificates. Higher Standard Certificates in the Preliminary Examination for M.A. under Ordinance No. 11 exempt from both of these examinations, but an examination in Book-keeping must be passed. A Lower Standard Certificate in the Preliminary Examination for M.A. under Ordinance No. 11 exempts from the first examination in General Knowledge in any subject to which that Certificate applies, and a Higher Standard Certificate exempts similarly from the second examination in General Knowledge. Certificates entitling to exemption from the first examination must be presented to the Clerk of the Board of Examiners of Law Agents before the commencement of apprenticeship. A candidate for admission as Law Agent is exempted from any examination in General Knowledge, including book-keeping, if (*inter alia*) he hold a Degree of any University in the United Kingdom granted after examination. By Act of Sederunt, 18th March, 1893, a candidate who holds the degree of LL.B. or B.L. of any Scottish University is exempted from any examination in Law, excepting only on Forms of Process, Civil and Criminal. But an Act of Sederunt of 23rd December, 1904, provides that a candidate who holds the Degree of LL.B. or B.L. of any Scottish University who has not passed in the Law of Scotland and Conveyancing, or either of them, for his

Degree shall be required to pass a qualifying examination in the omitted subject or subjects to the satisfaction of the Examiners of Law Agents.

The Act of Sederunt dated 11th July, 1899, provides *inter alia*:—(1) The first examination in general knowledge shall be taken before the commencement of apprenticeship, and no person shall be admitted as apprentice under indenture to a Law Agent until he shall have passed the said first examination. (2) The second examination in general knowledge may be taken at any time after the candidate has passed the first examination. (3) A candidate who fails to pass the first or second examination may again offer himself for examination, and shall be re-examined in all the subjects, or such part thereof as the examiners may determine. It shall be in the power of the examiners to fix a time before which a candidate who has failed to pass any examination shall not present himself again for examination. (4) No candidate shall be examined in Law until he has passed the second examination in General Knowledge.

For Regulations as to Graduation in Law, see Index.

LAW.

This Professorship is in the gift of the Crown. After being long in abeyance for want of revenue, it was revived by the College in 1712, and endowed by Queen Anne in the following year.

Professors.

1714. Wm. Forbes, Advocate.	1855. Geo. Skene, Advocate.
1746. Wm. Cross, Advocate.	1867. Robert Berry, M.A., LL.D., Advocate.
1750. Hercules Lindsay, LL.D.	1887. Alex. Moody Stuart, LL.D., Advocate.
1761. John Millar, Advocate.	1905. WILLIAM M. GLOAG, B.A., Advocate.
1801. R. Davidson, Advocate.	
1842. Allan A. Maconochie, Advocate.	

SCOTS LAW.¹—The course extends to about 100 Lectures, embracing as full a course of Scots Law in each session as the time will permit, and including, so far as practicable, Lectures on the following subjects:—Sources and Development of the Law

¹Students taking the curriculum for Graduation in Law are strongly recommended to take the Classes of Civil, Scots Law, and Conveyancing in separate sessions, and to take them in this order.

of Scotland; Law of Personal and Domestic relations—Marriage—Parent and Child—Succession—Trusts; Law of Property—Landownership—Patents—Copyright—Prescription; the Law of Obligations and Contracts generally, their Constitution and Extinction, Legality and Illegality—the Law of Sale—Retention and Lien—Loan; Deposit—Pledge—Hiring, and the Law of Master and Servant—Law of Carriers and Affreightment—Mandate—Partnership—Cautionary Obligations; Law of Landlord and Tenant; Law of Reparation—Personal injury—Defamation; Law of Diligence and Bankruptcy; Criminal Law, etc.

The text-book recommended to students is Erskine's *Principles of the Law of Scotland* (nineteenth edition).

The class meets five days a week—viz., every day except Monday, from 8 to 9 A.M. At intervals throughout the session the hour is devoted to the ordinary class examinations, which are conducted in writing.

Three Prizes are given by the University for proficiency in the class examinations; and the "Robert Ross Prize," being the free annual income of a sum of £500 bequeathed by the late Robert Ross, Esq., writer, Glasgow, is awarded in equal portions to the head students of the year in this class and in the class of Conveyancing. Prizes are also given by the Faculty of Procurators, generally for distinction in a special written examination towards the end of the session.

As to the Andrew Cunningham Bursary, see Index.

CONVEYANCING.¹

This Chair was instituted by ordinance of the Universities Commission (1858) of date 15th June, 1861, which was approved by Her Majesty Queen Victoria in Council on 11th October, 1861. The right of appointment to the Chair is vested in the Dean and Council of the Faculty of Procurators, Glasgow.

Professors.

1862. Anderson Kirkwood, LL.D.

1867. Sir James Robertson, LL.D.

1889. JAMES MOIR, LL.D., Member of the Faculty of Procurators, Glasgow.

The course extends to about 100 Lectures, and during the

¹See note at foot of page 131.

session there are both oral and written examinations. As full a course of Conveyancing is given each session as the time permits. The subjects treated will be selected from the following list, viz. : (1) Introductory and Preliminary Lectures. (2) The Feudal and Burgage System, the constitution of Feudal and Burgage Rights, and the transmission thereof by Deeds *inter vivos*, or by Judicial Acts. (3) Heritable Securities. (4) Leases. (5) Marriage Contracts, Bonds of Provision, Testamentary Deeds and Deeds of Entail. (6) The completion of Titles, in case of death, to Heritable and Moveable Estate.

The class meets every day, except Monday, from 8 to 9 A.M.

The text-books recommended are Duff's *Feudal Rights*, with Supplement; *Lectures on Conveyancing*, by Menzies; *Lectures on Conveyancing*, by A. M. Bell; and Craigie's *Statutes*.

Prizes are given for eminence in the class examinations during the session. Prizes are also given by the Faculty of Procurators for distinction in a written examination held towards the end of the session on some of the subjects of the course; and the "Robert Ross Prize," being the free annual income of a sum of £500 bequeathed by the late Robert Ross, Esq., writer, Glasgow, is awarded in equal portions to the head students of the year in this class and in the class of Scots Law.

As to the Andrew Cunningham Bursary, see Index.

FORENSIC MEDICINE.

This Professorship was created by the Crown in 1839.

Professors.

1839. Robert Cowan, M.D. | 1841. Harry Rainy, M.D.

1872. Pierce Adolphus Simpson, M.A. (Cantab.), M.D.

1898. JOHN GLAISTER, M.D., D.P.H. (Camb.), F.C.S., F.R.S.E.

This course, qualifying for graduation in Law (B.L. and LL.B.), will be delivered during the winter session at 9 A.M., after the Christmas vacation.

Text-books.—Guy and Ferrier, *Principles of Forensic Medicine*; Dixon Mann, *Manual of Medical Jurisprudence*; Glaister, *Text-book of Forensic Medicine*, etc., 1902.

(See under Faculty of Medicine, p. 117.)

POLITICAL ECONOMY.

(See under Faculty of Arts, p. 80.)

CIVIL LAW.¹

The study of Civil Law in Glasgow is coeval with the establishment of the University. In the University Annals it is recorded that, in 1460, lectures on the Civil Law were delivered in the Chapter-House of the Friars Predicators by Master William of Levenax (Lennox). After being for a considerable period in abeyance, the study of the subject was revived in 1712. In the middle of the eighteenth century the lectures were for the first time delivered in English; up to that time the prelections were in Latin. For some years during last century the lectures were once more in abeyance, but in session 1873-74 a class was again formed, and was taught in alternate sessions by the Professor of Law. In 1894 the University Court, carrying out a recommendation of the Universities Commission (1876), instituted a separate Lectureship in the subject.

Lecturer.

1895. J. M. IRVINE, LL.B., Advocate.

The course extends to eighty lectures. The first part of the course will deal with the Constitutional History of Rome and the history of the development of the law. This part is intended to serve as an introduction to the study of the special departments of the law. The latter part of the course will be devoted to a systematic exposition, in detail, of the various departments of the law, according to the order in which they are treated in Justinian's *Institutes*. The class meets four days a week during the winter session, from 5.30 to 6.30 P.M. Attendance at the class is required of all candidates for Degrees in Law (LL.B. and B.L.); it also qualifies for the Degree of M.A.

HONOURS IN ECONOMIC SCIENCE.—The lectures in the class of Civil Law up to Christmas, together with about twelve additional lectures given after Christmas separately from the ordinary course on Civil Law, constitute a half course on the History of Civil Law qualifying for the Degree of M.A. with Honours in Economic Science.² The additional lectures will deal with the history of Civil Law after the time of Justinian and with the influence of the Civil Law in the development of modern law and existing institutions.

Text-books.—*Institutes of Justinian*; Eds., Moyle or Sandars.

¹ See note at foot of page 131.

² See fifth note on p. 217.

Reference is also frequently made to *Institutes of Gaius* ; Eds., Poste or Muirhead.

History of Civil Law.—The text-books recommended for students taking the half course in History of Civil Law are Ortolan, *Histoire de la Législation Romaine* (English translation by Cutler) ; Taylor, *Constitutional History of Rome* (Lond. 1899) ; Bury, *History of the Later Roman Empire* (Lond. 1889).

CONSTITUTIONAL LAW AND HISTORY.

This Lectureship was instituted by the University in 1878, and the class was taught in alternate years during the summer session, the course extending to forty lectures. In 1894 the University Court, to meet the requirements of the Ordinances for Graduation in Law, placed the Lectureship upon a new footing. The course was extended to eighty lectures, and the class was made a Winter Class, meeting every year. In April, 1900, arrangements were made for extending the course to a hundred meetings for Arts students, and the extended course was recognized as a full course in Arts, qualifying for graduation for the ordinary Degree of M.A., and also for the Degree of M.A. with Honours in History. Attendance on the first eighty lectures of the course is required of all candidates for the Degree of Bachelor of Laws (LL.B.). Attendance on the first fifty lectures of the course qualifies for the Degree of B.L., subject to the conditions laid down in Ordinance No. 40.

Lecturers.

1878. Charles S. Dickson, M.A., Advocate.

1878. Alex. Ure, LL.B., Advocate.

1889. Robert T. Younger, LL.B., Advocate.

1894. WILLIAM S. McKECHNIE, LL.B., D.Phil.

ORDINARY CLASS.—The course will be partly historical and partly analytical. The historical lectures will trace in outline the development of the Constitution from the Anglo-Saxon migrations to the present reign. The analytical lectures will treat (1) of the safeguards of the rights of individuals, and (2) of the separate parts of the Constitution and the distribution of power in the State.

The text-books are Taswell-Langmead, *Constitutional History* ; Dicey, *Law of the Constitution* ; and Thomas, *Leading*

Cases in Constitutional Law. In addition, students are recommended to refer to Anson, *Law and Custom of the Constitution*; McKechnie, *Magna Carta*; and Bagehot, *English Constitution*.

The hour for the meeting of the class is 4.30 P.M.

HONOURS CLASS.—(See under Faculty of Arts, p. 89.)

GENERAL OR COMPARATIVE JURISPRUDENCE.

This Lectureship was instituted by the University in 1893, under the title Philosophy of Law. The subject was at an early date treated as an integral part of the course of Moral Philosophy, under the name of Natural Jurisprudence. From 1878 it was treated by the Lecturer on Public Law as introductory to that subject.

Lecturers.

1893. William Galbraith Miller, LL.B.

1904. JAMES A. M'CALLUM, LL.B.

The course is given on Mondays, Wednesdays, and Fridays during the winter session. The lectures for 1906-7 will be mainly devoted to the analysis of fundamental legal conceptions and legal classification, the development of law and legal conceptions, and the metaphysic of law. Written exercises will be prescribed. The same course under the name of Philosophy of Law may in a special case be reckoned as a half course for the Degree of M.A. by candidates for honours in Economic Science (see p. 217).

The class meets at 4.30 P.M. in the Faculty Hall, St. George's Place.

Text-books.—Holland, *Jurisprudence*; Maine, *Ancient Law*; Kant, *Philosophy of Law* (Hastie's translation).

THE LAW OF NATIONS, OR PUBLIC INTERNATIONAL LAW.

In 1878 the University instituted a Lectureship on Public Law. In 1894 the University Court, to meet the requirements of the ordinances for graduation in Law, created separate courses for International Private Law and for Jurisprudence.

Lecturers.

1878. William Galbraith Miller, LL.B.

1904. A. H. CHARTERIS, LL.B.

The course is given on Mondays, Wednesdays, and Fridays during the winter session. The course for 1906-7 will be doctrinal, dealing principally with the subjects of Nationality, and the relations of States in time of Peace. Written exercises are prescribed regularly.

Students are expected to be acquainted with the elements of the Civil Law, and to have a general acquaintance with Modern European History. *Text-book.*—Hall, *International Law*, or Lawrence, *Principles of International Law*.

The class meets at 5.30 P.M. in the Faculty Hall, St. George's Place.

INTERNATIONAL PRIVATE LAW.

From 1878 this subject was treated as part of the course of Public Law. In 1894 the University Court, to meet the requirements of the ordinances for graduation in Law, instituted a Lectureship on International Private Law.

Lecturers.

1894. William Galbraith Miller, LL.B.

1904. A. H. CHARTERIS, LL.B.

This course is given in the summer session. The lectures discuss the principal doctrines as developed in the decisions of the British Courts compared with the results of Continental Jurisprudence. The subjects comprise History, General Principles, Comity, Public Interest, Nationality and Domicil; and in different sessions some of the following in detail: (1) Marriage, Divorce, Guardianship, and Family Law; (2) Contract, Delict, and Mercantile Law, including Bankruptcy; (3) Succession and Trust Law, Conveyancing and Heritable Rights; (4) Copyright, Trademarks, etc.; (5) Procedure and Evidence; (6) Criminal Law and Extradition; the other subjects being sketched in outline. For purposes of comparison and illustration reference is made to the collections of foreign codes, and to the *Journal de droit international privé*, edited by M. Clunet, all of which will be found in the Library of the Faculty of Procurators. Students are expected to be familiar with the

leading doctrines of the Civil Law and of Scots Law. The class meets five days a week at 5.30 P.M. in the Faculty Hall, St. George's Place.

Text-book.—Rattigan, *Private International Law*. Students are expected to study the Statutes referred to, and certain leading cases prescribed, of which useful collections will be found in Nelson's *Private International Law*, Campbell's *Ruling Cases* (Domicil and Conflict of Laws), Beale's *Cases on the Conflict of Laws*.

MERCANTILE LAW.

This Lectureship was instituted by the University in 1894.

Lecturers.

1894. James Mackenzie, Member of the Faculty of Procurators, Glasgow.

1900. WILLIAM SHAW, Member of the Faculty of Procurators, Glasgow.

This course will extend to eighty lectures, and will embrace for the first half course the following subjects:—The Law of Contracts, including Retention, Pledge, the Factors Acts, Loan, Bankruptcy and Sequestration, Judicial Factors, Bills of Exchange, and Banking. The second half course will include the Law of Partnership, Joint Stock Companies; Maritime Law, including Affreightment, Lien, and Average; and Marine, Fire, Life, and Accident Insurance. Attendance on the whole course may, subject to the conditions laid down in Ordinance No. 39, be reckoned as qualifying for the Degree of LL.B.; and attendance on forty lectures, constituting a half course, may, subject to the conditions laid down in Ordinance No. 40, be reckoned as qualifying for the Degree of B.L. The principal subjects in the first half course have been prepared with special reference to the requirements of students intending to follow the profession of Accountants or Bankers. The class meets at 5.30 P.M.

EVIDENCE AND PROCEDURE.

This Lectureship was instituted by the University in 1905.

Lecturer—ROBERT LAMOND, LL.B.

The course of forty lectures will describe the principles of the Law of Evidence and the relevancy and kinds of evidence.

It will also include a description of the various Courts, the nature of their civil and criminal jurisdiction, the actions and proceedings competent in each and the Procedure followed.

The lectures are delivered on four or five days of the week at 8.45 A.M. during the Summer Session in the Faculty Hall, St. George's Place.

Text-books.—Mackay, *Manual of Court of Session Practice*; Dove Wilson, *Sheriff Court Practice in Civil Causes*; Macdonald, *Criminal Law and Criminal Procedure (Scotland) Act, 1887*; Dickson on *Evidence*. Reference will also be made to Statutes and leading cases bearing on the subjects dealt with.

FACULTY OF THEOLOGY.

The Faculty of Theology embraces the four classes of Divinity, Hebrew and Semitic Languages, Ecclesiastical History, and Divinity and Biblical Criticism.

The following regulations are applicable to students preparing for the ministry of the Church of Scotland. Under the Act of General Assembly, 1883, consolidating the Acts presently in force in regard to the study of Divinity, all candidates for the ministry are required to attend at the Divinity Hall either three full and regular sessions, or two full and regular sessions and three partial sessions; and to give at least two full sessions of regular attendance on the classes of Church History, Hebrew, and Biblical Criticism.

The following conspectus shows the order in which the classes should be taken :

FIRST YEAR.

9 a.m.,	Mon., Wed., Fri.,	-	-	-	New Testament Greek.
10 a.m.,	daily,	-	-	-	Hebrew.
11 a.m.,	daily,	-	-	-	Church History.
12 noon,	daily,	-	-	-	Divinity.

SECOND YEAR.

9 a.m.,	daily,	-	-	-	Hebrew.
10 a.m.,	daily,	-	-	-	Biblical Criticism.
11 a.m.,	daily,	-	-	-	Divinity.
12 noon,	Tu., Wed., Th.,	-	-	-	Honours Hebrew.

THIRD YEAR.

9 a.m.,	Mon.,	Wed.,	Fri.,	-	-	New Testament Greek.
10 a.m.,	daily,	-	-	-	-	Biblical Criticism.
11 a.m.,	daily,	-	-	-	-	Divinity.
12 noon,	daily,	-	-	-	-	Church History.

Each student, in order to be enrolled *for the first year* of his attendance, must present to the Professor of Divinity, *first*, a certificate from the Presbytery within the bounds of which he usually resides, and by which he has been examined on his knowledge of the Holy Scriptures according to the authorized version, and of the Catechetical Standards of the Church; *secondly*, a certificate signed by the Convener or Vice-Convener of the Examining Board appointed by the General Assembly to conduct the examination of students previous to their entering the Divinity Hall.¹ In order to be admitted to this examination he must, in accordance with the Act of Assembly, 1896, produce, in addition to the certificate from the Presbytery recommending him, either (*a*) the diploma of a Master of Arts of a Scottish University, or the diploma of a Bachelor of Arts after an undergraduate course at any British or Irish University, or at any Colonial University at which the course is equivalent to that of a Scottish University, and which shall be approved by the General Assembly on a report from the Committee on the admission of ministers and the status of students of Divinity, or evidence that he has passed the examinations for, and is entitled to receive, such diploma of Master or Bachelor of Arts; or (*b*) evidence that he has passed the Preliminary Examination required of those proceeding to the Degree of Master of Arts in a Scottish University, or such examination as the University authorities recognize as equivalent thereto, and that he has attended some one of the courses required² for

¹ The following are the subjects of examination for October, 1906: LATIN—Livy, Book V.; Horace, *Ars Poetica*; Prose Composition and translation of unseen passages. GREEK—Plato, *Apologia*; *St. Mark's Gospel*; translation of unseen passages and Prose Composition. HEBREW—The Grammar—Davidson's *Hebrew Grammar*, Sections 1—31. Genesis, Chapters I. and II., with grammatical questions limited to the sections in the Grammar prescribed. MORAL PHILOSOPHY—General account of Ethical Theories, Ancient and Modern, as in Muirhead, *Elements of Ethics* (University Extension Manual). The examination at Glasgow will take place at the University, 3rd and 4th October, 1906.

For further information and for forms of application apply to the Rev. John Smith, D.D., Manse, Partick.

² Any student who has gone through a curriculum in Arts in accordance with the provisions of Ordinance No. 11, but who has not graduated, may on application obtain, at the end of his course, a certificate to that effect at the Matriculation Office on production of his Preliminary Examination Certificate and the necessary Class-tickets duly signed.

that degree, and has not only attended the classes of the course, but has duly performed the work of each of them. Students who produce certificates of having passed in any subject with a view to the degree of M.A. at a Scottish University, will be exempted from examination in that subject. All students—graduates as well as non-graduates—will be examined in New Testament Greek, and those whose certificates in their progress to a degree do not cover Greek, Latin, Moral Philosophy, and Hebrew will, in addition, be examined in any or all of those subjects not included. For case of students who began their Arts course before 1896, see *Church of Scotland Year-Book*, p. 33.

The student, in order to his enrolment *for each subsequent session* of his course, is required to present to the Professor of Divinity (a) a certificate from the Presbytery within whose bounds he chiefly resides, of his having been examined by them on the progress made by him in his studies, and of their satisfaction with the same, as well as (b) a certificate of his good moral character from the minister of his parish, or, during a vacancy in the parish, from the moderator of the kirk-session.

At the close of each session every student is required to take with him to the Presbytery certificates from the several Professors, under whom he has studied, of his good conduct and proficiency.

Candidates for licence who have finished a regular course of study in Theology shall be examined as soon as it can conveniently be done after the close of the Divinity session by the Examining Board. "The following shall be the heads of subjects of examination:—(i.) Apologetics, including Natural Theology; (ii.) Church History; (iii.) Old Testament Introduction and Exegesis; (iv.) New Testament Introduction and Exegesis; (v.) Christian Doctrine." "Students who have passed for the Degree of B.D., and who satisfy the Committee that they have done so, shall be exempted from examination in the subjects covered by the Degree of B.D." The Exit Examination for 1907 will be held at the University on 23rd and 24th April at 10 a.m.

The subjects of examination will be

- I. *Apologetics*. Flint's *Antitheistic Theories*.
- II. *Church History*.—1. To A.D. 325. 2. Scottish Church History, from 1688 to the present time.

- III. *Old Testament Introduction and Exegesis*.—1. Amos: Text and Introduction. 2. Psalms xlv.-lx.
- IV. *New Testament Introduction and Exegesis*.—1. Epistle to Ephesians. 2. Greek New Testament *ad aperturam*.
- V. *Christian Doctrine*.—1. The Doctrine of the Holy Spirit. 2. The Theology of the First Epistle to the Corinthians. 3. Confession of Faith.

Those who have passed for the degree of B.D. will be examined in I., IV. 2, and V. 3 only.

The Convener of the Board is the Rev. David Paul, LL.D., 53 Fountainhall Road, Edinburgh.

Students are required to study the art of public reading and speaking under some competent teacher approved by the Faculty of Theology,¹ during at least one hour a week in each of two sessions, the attendance extending in every case over at least sixteen weeks of the session, and to produce, before being taken on trials, due evidence of such attendance.

By Act IX. of the General Assembly, 1895, it is enacted—"that every student before being taken on trial for licence shall produce evidence of having regularly attended two courses of the Pastoral Lectures provided by the Home Mission Committee."

Each student is required during his curriculum to deliver *six* discourses—viz., an ESSAY in English on some head in Divinity, a HOMILY in English, a CRITICAL EXERCISE on some portion of the original text of the Old Testament, an EXERCISE and ADDITION on some portion of the original text of the New Testament, a LECTURE on some portion of Scripture, and a POPULAR SERMON, with such other exercises as the Professors may think fit to prescribe. No student can be taken on trials for licence by any Presbytery until he has produced, along with class certificates from the Professors of Church History, Hebrew, and Biblical Criticism, a certificate from the Professor of Divinity that the discourses so prescribed have been sustained.

¹ For the purposes of the Act of Assembly, and to qualify for the competition for the Downhill Prizes, the following teachers are recognised:—Mr. Thomas Harrower, 282 Bath Street; Mr. John Forsyth, 20 Rupert Street; Mr. David B. Johnstone, A.M., 2 Ann Street, Hillhead; Mr. Charles Aitken, Christian Institute, Bothwell Street; Mr. J. Bruce Alston, 207 Bath Street; Mr. Archibald Paterson, 43 Dalhousie Street; Mr. Graham Price, 23 Charing Cross Mansions, W.; and Mr. A. P. Roxburgh, F.E.I.S., 7 Caird Drive, Partickhill.

The Faculty of Theology have adopted the following regulations as to the delivery of these discourses:—(1) That the Homily shall be given in to the Professor of Church History at such time as he shall appoint in the *first* session of the student's course; (2) that the English Essay shall be given in to the Professor of Divinity, and the Lecture to the Professor of Biblical Criticism, in the *second* year of the student's course, at such times as shall be appointed by these Professors respectively; and (3) that the Popular Sermon shall be given in to the Professor of Divinity, the Hebrew Critical Exercise to the Professor of Oriental Languages, and the Exercise and Addition to the Professor of Biblical Criticism, in the *third* session of the course, at such times as shall be appointed by the several Professors. The subjects of the Discourses will be prescribed by the Professors to whom they are severally to be given in.

DIVINITY.

This Professorship was founded in 1640, and the foundation ratified in Parliament. The Professor is appointed by the University Court.

Professors.

1640-50. David Dickson.	1761. Robert Trail, D.D.
1642-61. Robert Baillie.	1775. James Baillie, D.D.
1653. John Young.	1778. William Wight, D.D.
1669. Gilbert Burnet, D.D.	1782. Robert Findlay, D.D.
1674. David Liddell.	1814. Stevenson Macgill, D.D.
1682. Alexander Ross, D.D.	1840. Alexander Hill, D.D.
1688. James Wemyss, D.D.	1862. John Caird, D.D.
1692. James Wodrow.	1873. William Purdie Dickson,
1708. John Simson.	D.D., LL.D.
1740. Michael Potter.	1895. William Hastie, D.D.
1744. William Leechman, D.D.	

1903. HENRY MARTYN BECKWITH REID, D.D.

The course of Theology extends over three sessions.

The class meets on five days of the week, in two divisions, the Senior at 11 A.M. and the Junior at 12 o'clock.

The subjects treated in the Lectures during the three sessions are—(1) Theology as a Science (Theological Introduction and Encyclopaedia); (2) Philosophy of Religion; (3) Apologetics; (4) History of Religion; (5) Biblical Theology; (6) History of

Doctrine ; (7) Systematic Theology (Dogmatics and Ethics). Essays and Discourses are prescribed to the students. Examinations on the studies of the class will be held at intervals during the session.

PASTORAL TRAINING.—By a recent arrangement six Lectures on this subject will be given by a Lecturer appointed by the General Assembly.

HEBREW AND SEMITIC LANGUAGES.

This Professorship was founded by Queen Anne, 1709, under the title Oriental Languages. It is now designated Hebrew and Semitic Languages, in accordance with Ordinance No. 31 of the Universities Commission (1889) of date 5th June, 1893. The Professor is appointed by the University Court, and is a member not only of the Faculty of Divinity, but also, since 1893, of the Faculty of Arts.

Professors.

1709. Charles Morthland.	1761. Robert Trail, D.D.
1745. Alexander Dunlop, M.A.	1761. Patrick Cumin, LL.D.
1751. William Rouet.	1820. ¹ Gavin Gibb, D.D.
1753. George Muirhead.	1831. William Fleming, D.D.
1755. John Anderson, M.A.	1839. George Grey, D.D.
1757. James Buchanan, M.A.	1850. Duncan H. Weir, D.D.
1877. JAMES ROBERTSON, D.D.	

By Ordinance No. 11 of the Universities Commission (1889) "Hebrew" and "Arabic or Syriac" are now included among the departments of study for graduation in Arts, and "Semitic Languages" among those for graduation with Honours.

The existing regulations of the Church of Scotland require all students of Divinity to give attendance on Hebrew for two sessions. The following are the arrangements for session 1906-7 :—

I.—*Junior Class (Hebrew)*, five days in the week at 10 A.M.
(1) Davidson's *Introductory Hebrew Grammar*, with the Exercises ; (2) Readings from the easier books of Scripture ; (3) Lectures on Hebrew Archaeology.

II.—*Senior Class (Hebrew)*, five days in the week at 9 A.M., and two days in the week at twelve noon. (1) Readings

¹ Dr. Gibb was assistant and successor to Dr. Cumin from 10th October, 1814.

in the Hebrew Scriptures, particularly in the books prescribed for degrees of M.A. and B.D.; (2) Exercises in Unpointed Text and Translations from English; (3) Study of the Syntax and the Accents; (4) Revisal and extended study of Grammar; (5) Lectures on History and Introduction.

The Senior Hebrew is appointed as the qualifying class for graduation in Arts. Before attending the class for this purpose, students are required by the Ordinance No. 11, sect. iv., 3, to pass a preliminary examination in Hebrew "on a standard as nearly as possible equivalent to the higher standard of the languages included in the Preliminary Examination." Students presenting themselves for this examination will be expected to know as much as is implied in the work of the Junior Hebrew Class, and will be examined in grammar, and in translation both from Hebrew into English and from English into Hebrew.

III.—*Honours Class (Hebrew)*: Tuesday, Wednesday, and Thursday, at 12 noon. Lectures on the History and Literature of the Hebrews; Prelections and Expositions of some of the books prescribed for the degree examinations; Readings in post-biblical Hebrew. Written exercises in Composition. History and comparison of the Semitic Languages.

IV.—For *Arabic Classes* see below.

A class for *Syriac*, to meet two days in the week at 9 A.M., will also be formed, if students offer.

ARABIC LANGUAGE AND LITERATURE.

This Lectureship was instituted by the University Court in 1902.

Lecturer—THOMAS H. WEIR, B.D., M.R.A.S.

I.—An Elementary Class meets three days a week in winter and daily in summer at any hour that may be found suitable. The work includes study of the grammar with progressive written exercises, and translation from and into Arabic. Text-book: Socin, *Arabic Grammar*. If sufficient students offer, a special class will be formed for modern and conversational Arabic.

II. *Ordinary Class*.—This class qualifies for graduation in Arts, and may be taken either in one full course of one hundred

meetings, or in two half courses, the second half being a continuation of the first. The subjects of study comprise Grammar and Syntax, selected surahs of the Koran, selections from classical historians and poets, and history of the Arabs and their literature. Text-books: Nallino, *Chrestomathia Qorani Arabica*; Brünnow, *Chrestomathie*; Noeldeke, *Delectus Veterum Carminum Arabicorum*; Sale, *Koran*.

III. *Honours Class*.—This class is intended for those who wish to graduate with honours in Semitic Languages. The subjects of study will be the Koran with commentary, the *Makamat* of Hariri, Arabic Grammar, selections from the early poets. Text-books: Baidawi, *Commentary*; Hariri, *Makamat*, *Majani 'l Adab*, vol. vi., *Al Fakhri* (Derenbourg's Edition); Wright, *Arabic Grammar*.

For the *Oriental Society's Prize in Arabic*, see under *Prizes*, and for the *John Clark (Mile-end) Scholarship in Semitic Languages*, see under *Scholarships*.

ECCLESIASTICAL HISTORY.

The Professorship of Ecclesiastical History was founded by George I., in the year 1716, but no appointment was made to the Chair till the year 1720. The Professor is appointed by the Crown.

Professors.

1721. William Anderson.	1841. Jas. Seaton Reid, D.D.
1752. William Rouet.	1851. Thos. T. Jackson, D.D.
1762. William Wight, D.D.	1874. William Lee, D.D.
1778. Hugh M ^c Leod, D.D.	1886. Robert Herbert Story,
1809 ¹ . William M ^c Turk, D.D.	D.D., LL.D.
1898. JAMES COOPER, D.D.	

The course extends over two sessions, and embraces two series of lectures as well as written examinations and essays. The Junior and Senior Classes meet at separate hours, the Junior from 11 to 12 o'clock, the Senior from 12 to 1 o'clock.

The subjects treated in the Lectures during the two sessions will be:

I. JUNIOR CLASS.—The History of the Church Catholic from the Day of Pentecost to the close of the Fourth General Council. Books recommended—Mosheim, *Institutes of Ecclesi-*

¹ Dr. M^cTurk was assistant and successor to Dr. M^cLeod from 6th March, 1797.

astical History (edited by Stubbs); the *Church Histories* of Moeller, Kurtz, Neander, Gieseler, Schaff, and Canon Robertson (the parts covering the period above indicated); Harnack, *History of Dogma and Expansion of Christianity in the First Three Centuries* (trans. Moffatt); Eusebius, *Ecclesiastical History* (ed. Bright, Oxford, 1881; translation by M'Giffert); *The Teaching of the Twelve*; *The Apostolic Fathers* (ed. Lightfoot); The Library of Ante-Nicene Fathers; Ramsay, *The Church in the Roman Empire before A.D. 170*, *S. Paul the Traveller and Roman Citizen*, and *The Letters to the Seven Churches*; Pullan, *History of Early Christianity*, and *The Church of the Fathers*; Wordsworth, *The Ministry of Grace*; Puller, *The Primitive Saints and the See of Rome*; Rainy, *The Ancient Catholic Church*; Kelly, *A History of the Church of Christ*; Bright, *Waymarks of Church History* and *The Age of the Fathers*; Mason, *Historic Martyrs of the Primitive Church*; Hefele, *History of the Church Councils*; Percival, *The Seven Oecumenical Councils* (the first Four); Newman, *Arians of the Fourth Century*; Gibbon, *The Decline and Fall of the Roman Empire* (ed. Bury); Hodgkin, *Italy and her Invaders*, vols. I. and II. P. Allard, *Histoire de persécutions* and *Le Christianisme et l'empire romain de Néron à Théodore*.

II. SENIOR CLASS.—(1) The History of the Church of Scotland; (2) The History of the Church of England; (3) Some Important Epochs in the History of the Church. (N.B.—The special subject taken up in Session 1906-7 will be The Ecclesiastical History of England, Scotland and Ireland from 1702 to 1760.)

Books recommended—Grub, Cunningham, or Stephen, on the Ecclesiastical History of Scotland; Skene, *Celtic Scotland*; Dowden, *The Celtic Church in Scotland*; Macgregor, *Saint Columba*; Adamnan, *Saint Columba* (edit. Huyshe); The Chronicles of the Picts and Scots; the series "The Historians of Scotland"; Joseph Robertson, *Statuta Ecclesiae Scoticanæ*; John Knox, *History of the Reformation in Scotland* (ed. Laing); Spottiswood; Calderwood; Baillie; M'Crie, *Knox*; William Robertson, *History of Scotland*; Hume Brown, *History of Scotland and John Knox*; Andrew Lang, *History of Scotland*; W. L. Mathieson, *Politics and Religion in Scotland, 1550-1695*; Haddan and

Stubbs, *Councils of Great Britain and Ireland*; Bede, *Ecclesiastical History of England*; Fuller, *Church History of Britain*; Collier, *Ecclesiastical History of Great Britain*; Stubbs, *Constitutional History of England*; Hume, Lingard, Macaulay, Froude, and S. R. Gardiner, *Histories of England*; Wakeman, *History of the Church of England*; A History of the English Church, edited by Stephens and Hunt; Dixon, *History of the Church of England*; Burnet, *History of the Reformation*; Stoughton, *Religion in England*, part covering period, and the books recommended at page 293 for those studying for the Degree of B.D.

The following subjects have been prescribed for *Essays, which must be given in before Nov. 30th, 1906*: (1) The Resurrection of the Body, as taught in the New Testament, and by the Ante-Nicene Fathers; (2) Unitarianism and the Church's answer to it, in the Ante-Nicene period; (3) The Life and Works of S. Basil; (4) S. Martin of Tours; (5) The case of the Episcopalians in Scotland at and after the Revolution (1688-1720); (6) The *Confessio* and *Epistola ad Coroticum* of S. Patrick: Translation and Notes. (7) The Ecclesiology and Ecclesiastical History of any Parish in Scotland in or near which the student may be resident. Marks, up to 100, according to merit, will be assigned (session 1906-7) to the writers of *one* of those essays.

A written examination of the Senior Class (session 1906-1907) will be held not later than 30th Nov., 1906, on Venerable Bede's *Ecclesiastical History of England* and S. Adamnan's *Saint Columba* (which may be read in translations), for which marks up to 100 may be obtained. The marks obtained both for the essay and for this examination will count for the Prize List. The subjects for Essays to be given in November, 1907, are as follows: (1) S. Paul's attitude (*a*) to Courts Christian, and (*b*) to the Law Courts of the Roman Empire; (2) Sabellianism: its appearance in the Ancient Church and its recrudescence in Modern times; (3) S. Leo the Great, Theologian and Pope; (4) S. Boniface, the "Apostle of Germany," his missionary labours and letters; (5) The treatment of the Covenants—the National Covenant, and Solemn League and Covenant—by the Church of Scotland at the Revolution; (7) The Ecclesiology, and Ecclesiastical History of any Parish in Scotland in or near which the student may have been resident.

DIVINITY AND BIBLICAL CRITICISM.

This Professorship was founded by ordinance of the Universities Commission (1858) of date 25th November, 1861. The Professor is appointed by the Crown.

Professors.

1863. William P. Dickson, D.D.

1873. WILLIAM STEWART, D.D.

This class will meet on five days of the week at 10 A.M.

The course of lectures is arranged to extend over two sessions; and the class should accordingly be attended in two *consecutive* years. It is usually taken in the second and third years of the Divinity course. For due performance of the work of the class a knowledge of Greek, at least of New Testament Greek, is indispensable. (See below.)

The lectures in 1906-7 will treat of the principles of Interpretation, and of some portions of New Testament Introduction.

The practical application of the principles of Criticism and Hermeneutics will be illustrated in Exegetical Lectures, and by the reading of portions of the Greek New Testament.

Essays on subjects suggested by the work of the class are prescribed at intervals during the session, and the progress of the students is further tested by examinations, partly oral and partly written.

Class of New Testament Greek.—Those who have not included Greek in their Arts course, or who have not succeeded in making themselves familiar with New Testament Greek, should not fail to attend this tutorial class in the first session of their Divinity course, that they may be in a position to profit by the prelections and exercises in the Biblical Criticism Class during the two succeeding years. It should be noted also that in the Exit Examination all students, both Bachelors of Divinity and others, are required to show proficiency in reading the New Testament in Greek *ad aperturam*. The Class will meet on three days of the week, viz., Monday, Wednesday, and Friday at 9 A.M. The hour has been fixed to suit the convenience of Students in the first and the third year of the Divinity course. (See time-table on pp. 139, 140.)

IV.—*ENDOWED DEMONSTRATORSHIPS, ETC.*

THE ARNOTT AND THOMSON DEMONSTRATORSHIP IN EXPERIMENTAL PHYSICS.

This Demonstratorship was founded in 1875 by the liberality of Sir William Thomson and Mrs. Arnott, widow of Dr. Neil Arnott, founder of the Arnott Prizes, who invested respectively £2,000 and £1,000 for the purpose of encouraging the study of Experimental Physics in the University of Glasgow. The Demonstratorship is in connection with the Physical Laboratory of the University. The holder is appointed annually by the Professor of Natural Philosophy, subject to the approval of the University Court, and his duties are to perform, and direct in the performance of, experimental researches in the Physical Laboratory, in connection with, and under the direction of, the Professor of Natural Philosophy, to give practical laboratory courses suitable for Medical and Engineering students, and to take part in the teaching of the Natural Philosophy Class, if required by the Professor, and in such way and at such times as may be appointed by the Senatus Academicus of the University.

Demonstrators.

1875. James Thomson Bottomley, M.A., D.Sc., F.R.S.

1899. James W. Peck, M.A.

1903. JAMES MUIR, D.Sc., M.A.

THE MUIRHEAD DEMONSTRATORSHIP OF PHYSIOLOGY.

In January, 1877, the late Dr. Henry Muirhead of Longdales, Bothwell Parish, and afterwards of Cambuslang, presented to the University the sum of £2,100, and in November, 1879, a further sum of £400, to endow a Demonstratorship of Physiology in connection with the Chair of Institutes of Medicine—the main object being the promotion of medical science by the training of young men of suitable capacity to become teachers and investigators of Physiology. The regulations with reference to the appointment are as follows:—

1. That the title of the appointment be “The Muirhead Demonstrator of Physiology.”

2. That the holder of the office shall act as an assistant to the Professor of Institutes of Medicine in teaching the classes of Systematic and Practical Physiology and in original investigation.

3. That he shall also be expected and encouraged to engage in independent scientific investigation under the direction of the Professor.

4. That he will not be entitled to conduct any class on his own account without the consent of the Professor.

5. That the incumbent will be expected to devote his entire time to the duties of the appointment.

6. That the appointment be made annually by the Senatus Academicus, with the consent of the University Court, on the recommendation of the Professor of the Institutes of Medicine, who shall furnish evidence to the Senatus of the suitability of the person recommended by him.

Present Demonstrator.

WALTER COLQUHOUN, M.A., M.B., C.M.

GRIEVE LECTURESHIP ON PHYSIOLOGICAL CHEMISTRY.

The late John Grieve, M.A., M.D., who died at Glasgow on 16th April, 1896, directed his Trustees to hand over to the University the sum of £8000 (less legacy duty) for the foundation of a Lectureship on some subject selected by them after consultation with certain Professors. The subject selected was Physiological Chemistry, and the following scheme prepared by the Senate was approved by the University Court on 9th February, 1905.

1. The bequest of the late Dr. John Grieve shall be applied to the foundation of a Lectureship on Physiological Chemistry in the University of Glasgow, to be called the "Grieve Lectureship on Physiological Chemistry."

2. The capital sum of the bequest shall be invested by the University Court, and the annual revenue shall be the salary of the holder of the lectureship for the time being.

3. The appointment to the lectureship shall be made by the University Court.

4. The appointment shall be for a term of five years, but the lecturer may be re-elected in the discretion of the University Court.

5. The lectureship shall be in connection with the Physiological Department of the University, and accommodation for the lecturer shall be provided in that Department by arrangement with the Professor of Physiology.

6. The lecturer shall not engage in medical or surgical practice during his tenure of office.

7. The duties of the Lecturer shall be as follows :

(1) He shall deliver annually such a course of lectures or give such demonstrations in Physiological Chemistry, on the more advanced aspects of the subject, in its relation to the phenomena of Plant and Animal life, as may from time to time be arranged by the Senate, with the approval of the University Court.

(2) He shall take charge of the laboratory for Physiological Chemistry in the Physiological Department of the new buildings, under the control of the Professor, in terms of Ordinance No. 17, General No. 10 ; he shall supervise the chemical work of students of physiology preparing for the degree of Bachelor of Science ; and generally he shall give assistance to students or others who may be engaged in researches in Physiological Chemistry.

(3) He shall make arrangements, under the control of the Professor, for the teaching of elementary Physiological Chemistry to students of science and medicine, in terms of the above Ordinance.

(4) He shall prosecute original research in Physiological Chemistry.

Lecturer.—1905. EDWARD P. CATHCART, M.D.

THE WILLIAM BAXTER DEMONSTRATORSHIP IN GEOLOGY.

This Demonstratorship was founded by the Trust Disposition and Settlement of Mr. William Baxter, Hillhead, Glasgow, who died on 20th November, 1888, and bequeathed to the Senate the sum of £2,500, free of legacy duty, the annual income of which, less the cost of management, he directed should be paid half-yearly to the Demonstrator on the joint certificate of the Clerk of Senate and the teacher of Geology for the time being. The Senate are the patrons of the Demonstratorship.

The following Regulations, drawn in terms of the Founder's will, were adopted by the Senate on 28th February, 1889 :—

1. The Demonstratorship shall be held for three years, and shall be open to the candidate who in the three years intervening between each appointment shall have passed the Degree of

B.Sc. with Honours, or, in the event of several candidates obtaining Honours, to the candidate whose aggregate marks for the whole subjects of the said degree are the highest; but in the event of no candidate attaining to Honours, the Senate may, if they see fit, award the Demonstratorship to the candidate who shall stand highest in the list, provided his average of marks over all the said subjects is not less than 70 per cent., but any candidate who fails to obtain at least 70 per cent. of marks in the Department of Geology shall *eo ipso* be disqualified to hold the Demonstratorship.

2. The three years' tenure of office shall be subject to the condition that the incumbent discharges the duties of the office to the satisfaction of the Senate, who have power "to deprive any Demonstrator of his stipend, or a part thereof, should they at any time become dissatisfied with his conduct or his ability to carry out the duties of his office, or with the character of his lectures, or for any other reason they may consider sufficient," the Demonstrator having the right of appeal to the University Court in the event of such deprivation.

3. The duties of the Demonstrator shall be :—

(1) To deliver two courses of lectures—twenty in the winter, twenty in the summer session—(a) on Mineralogy and Petrology, or (b) on Palæontology, or (c) on Physical Geography. These lectures to be accompanied by Demonstrations on specimens selected from the Hunterian collections with the consent of the Keeper.

(2) To give Field Demonstrations of Geology and Petrology, under the direction of the Professor of Natural History (or of Geology when that Chair shall be founded).

(3) To carry on original work in any department of Geological Science which he may select, obtaining therein such assistance by specimens as the Keeper of the Museum shall find it in his power to give.

4. These courses of lectures may be attended (a) by matriculated students of Geology, free; (b) by any matriculated student not a member of the class of Geology, on payment to the Demonstrator of a fee of £1 1s. for each course, or such higher fee as the University Court may fix; (c) by any member of the Geological Society of Glasgow on payment of five shillings in lieu of matriculation fee for the winter or summer session, in addition to the authorized class fee.

5. In the event of no appointment being made, or of the Demonstrator resigning, retiring, or being deprived, the revenue accruing during the period of vacancy shall be added to the capital, and the annual income thereof to the stipend payable to the Demonstrators.

Demonstrator—WILLIAM R. WISEMAN, M.A., B.Sc., 1905.

WALTONIAN MEDICAL LECTURESHIP.

This Lectureship was founded in 1788 by the Rev. Dr. William Walton, Rector of Upton, in the County of Huntingdon, who bequeathed to the Senate for its support the sum of £1000, increased by subsequent accumulations to £2787. The lecturer is required to take for his subject that branch of Medicine or Science connected with Medicine which may be assigned to him by the Governing Body of the University. From 1792 a salary was provided out of the Walton Fund for a lecturer on Midwifery till 1815, when the Chair of Midwifery was founded. From 1816 provision was made in like manner for the teaching of *Materia Medica* till a Chair in that subject was founded in 1831. Since 1831 the lectureship has been devoted to the subject of Ophthalmology, but, on the resignation of Dr. Thomas Reid in the end of 1900, the University Court, taking into account that the requirements of Ophthalmology under the new Ordinances were met by the training afforded to students in the Glasgow Eye Infirmary and the Glasgow Ophthalmic Institution, resolved to devote the proceeds of the Foundation to the teaching of some other subject. The arrangements for this are not yet completed.

Lecturers.

Midwifery—1792-1815. James Towers, C.M.

Materia Medica—1816-1831. Richard Millar, M.D.

Ophthalmology—1831-1868. William M'Kenzie, M.D.

Ophthalmology—1871-1900. Thomas Reid, M.D., LL.D.

GIFFORD LECTURESHIP ON NATURAL THEOLOGY.

This Lectureship, as well as similar Lectureships in the other Scottish Universities, was founded in 1887 in accordance with the Trust Disposition and Settlement of the late Adam Gifford, sometime one of the Senators of the College of Justice,

Scotland. Lord Gifford directed his Trustees to pay over to the *Senatus Academicus* of the University of Glasgow the sum of Twenty Thousand Pounds for the purpose of establishing a Lectureship or Popular Chair for promoting, advancing, and diffusing the study of Natural Theology, in the widest sense of that term—in other words, “the Knowledge of God, the Infinite, the All, the First and Only Cause, the One and the Sole Substance, the Sole Being, the Sole Reality, and the Sole Existence, the Knowledge of his Nature and Attributes, the Knowledge of the Relations which men and the whole universe bear to Him, the Knowledge of the Nature and Foundation of Ethics or Morals, and of all Obligations and Duties thence arising.” The Senate are the Patrons. The Lecturer is appointed for a period of two years and no longer, but the same Lecturer may be reappointed for other two periods of two years each, provided that no one person shall hold the office of Lecturer in this University for more than six years in all. The Lecturer is subjected to no test of any kind, and he is not required to take any oath, or to emit or subscribe any declaration of belief, or to make any promise of any kind. The Founder expressed a wish that the subject should be treated as a strictly natural science, like astronomy or chemistry. Matriculated students and others may attend the Lectures.

1888. Professor Max Müller.

1892. Principal Caird, D.D., LL.D.

1893. Professor William Wallace, M.A.

1895. Principal Caird, D.D., LL.D.

1896. Professor Alexander B. Bruce, D.D.

1900. Edward Caird, D.C.L., LL.D., Master of Balliol.

1903. Professor Émile Boutroux.

1906. PROFESSOR A. C. BRADLEY, LL.D.

ALEXANDER ROBERTSON LECTURESHIP.

The Rev. Alexander Robertson, a probationer of the Free Church of Scotland, who died at Glasgow on 3rd August, 1899, left the residue of his estate, amounting to £2500, for the endowment of a Lectureship in defence of the Christian Religion. The regulations drawn up by his Trustees—Mr. James Lymburn, Librarian to the University, and the Rev. James B. Dalgety,

Paisley—received the sanction of the University Court on 14th November, 1901, and are as follows:

1. The Lectureship shall be called the Alexander Robertson Lectures.

2. The course shall be held not oftener than once in every two years, and shall consist of not fewer than five lectures.

3. Out of the revenue of the Lectureship Fund the lecturer shall be paid the sum of £100 when the lectures have been delivered, and a further sum of £50, provided he shall have published his lectures within one year of their delivery, and shall have furnished to the Library of the University of Glasgow fifty copies for distribution.

4. The Lecturer shall be appointed by the University Court on the nomination of a Committee consisting of the Principal of the University and of the Professors in the Faculty of Theology; and it shall be in the power of the Committee to nominate, if they see fit, a member of the Faculty of Theology.

5. It shall be the duty of the Court, at least twelve months before the income of the Lectureship Fund shall have reached the sum necessary to pay the remuneration of the Lecturer and the grant for publication of the lectures, to send intimation to that effect to the Dean of the Faculty of Theology, and should the aforesaid Committee fail to nominate any one within six months after receiving the said intimation, it shall be in the power of the Court to proceed of itself to the selection and appointment of a Lecturer.

6. The lectures shall be delivered at such times and in such place or places as the said Committee may appoint. Admission to the course shall not be restricted to matriculated students, but shall be freely open to the general public.

7. All surplus revenue and any balance accruing from the non-publication of the lectures or otherwise shall be added to the capital fund of the Lectureship. But should at any time the biennial income of the fund reach a larger sum than £150, two-thirds of the balance over that amount shall go to augment the emolument of the Lecturer, and one-third to increase the grant for the publication of the lectures.

Lecturers.

1904. John Morrison, D.D.

1906. ERNEST F. SCOTT, B.D.

M'CALLUM CELTIC LECTURESHIP.

The late Rev. Archibald Kelly M'Callum, LL.D., by his holograph will, dated 8th March, 1881, to which were attached three codicils (the last dated 27th January, 1892), directed his Trustees, among other purposes, to devote an annual sum to a Lectureship, or a course of not fewer than fifteen Lectures, on Celtic Literature. He left detailed directions as to certain subjects which were to be among those discussed. The Lecturer was to be appointed by the University Court for a period of three years, and was to be eligible for re-election after a subsequent appointment for three years had been made. Matriculated students and others might attend the Lectures. Dr. M'Callum also directed that his library should be handed over to the University as a nucleus for a Celtic Library for the use of the Lecturers and such students as might attend the Lectures, and any others interested in Celtic Literature. The Library was to be kept separate and designated "The Celtic Lectureship Library," and the sum of £10 to be annually expended in making additions thereto.

Lecturers—1900. Professor Magnus Maclean, D.Sc.

1903. Professor Kuno Meyer, Ph.D.

This lectureship was placed on a new footing by a Provisional Order made by His Majesty's Secretary for Scotland under the provisions of the Private Legislation Procedure (Scotland) Act, 1899, and confirmed by Parliament on 4th August, 1905, by the Glasgow University Order Confirmation Act, 1905.

CELTIC.

Lecturer—GEORGE HENDERSON, Ph.D.

The course now qualifies for graduation in Arts. Any student who attends with a view to this must previously have passed a Preliminary Examination in Scottish or Irish Gaelic, or in Welsh, including translations from and into English, with grammatical, literary, and philological questions.

The course for 1906-1907 will embrace :—

A. Language. The Principles of Celtic Philology, Phonology, Grammar of the Gaelic Language; Introduction to Old Irish, Windisch's Irish Grammar (trans. by Moore); Strachan's *Paradigms and Selections from the Old Irish Glosses*.

B. Literature. Windisch's *Irische Texte mit Wörterbuch*. Kuno Meyer's *Voyage of Bran, the Son of Febal* (Vol. I.) and Meyer's *Early Irish Texts* Leigheas Cois' O'Céin (ed. Henderson). The Poems of Alexander Macdonald of Ardnamurchan. Selections from the standard literature of the modern period of Scottish Gaelic.

C. Palaeography. Readings from Facsimiles of Old Gaelic Texts.

The class will meet daily at an hour to be arranged.

*V.—WOMEN'S DEPARTMENT.**QUEEN MARGARET COLLEGE.*

In February, 1892, the Universities Commission issued an Ordinance (No. 18), empowering the Scottish University Courts to make provision within the Universities for the instruction of women, either by admitting them to the ordinary classes, or by instituting separate classes for their instruction. The Council of Queen Margaret College, having considered the provisions of this ordinance, came to the conclusion that the purpose for which the College had been instituted would be best served by making over their work to the University of Glasgow. They accordingly, with the concurrence of the late Mrs. Elder, the proprietrix of the buildings and grounds hitherto occupied by the College, offered to transfer to the University Court these buildings and grounds, and the endowments (present and prospective), on condition that these should be devoted to the establishment and maintenance of University Classes for women exclusively. The University Court, after consultation with the Senate, having resolved to exercise the power conferred by Ordinance No. 18, and to provide University instruction for women mainly by the institution of separate classes, agreed to accept the offer made by Queen Margaret College, and remitted to a Committee to take the necessary steps for completing the transfer. In virtue of this arrangement the teachers in Queen Margaret College were appointed by the University Court, and the students in session 1892-3 were admitted matriculated students of the University. In 1893 the College was dissolved, and the funds were handed over to the University Court, but the name "Queen Margaret College" survives as designating the part of the University buildings and grounds which is devoted exclusively to the education of women.

ALL women students are required to matriculate and to pay their Class Fees and Examination Fees at Queen Margaret College.

The classes in Queen Margaret College will meet as follows daily, unless otherwise specified :—

WINTER SESSION 1906-7.

I.—ARTS.

THURSDAY, 18TH OCTOBER.

<i>Classes.</i>	<i>Hours.</i>	<i>Class Fees.</i>	
<i>Latin, Class I.,</i>	9.45 a.m.,	£4 4 ⁶	{ PROF. RAMSAY, Mr. D. Rankin, and Mr. R. Nisbet.
<i>Class II.,</i>	3 p.m.,	4 4 ⁶	
<i>Greek,¹</i>	8.45 a.m.,	4 4 ⁶	{ PROF. PHILLIMORE and Mr. W. Rennie.
<i>Greek¹ (at the University),</i>	8 a.m.,	4 4 ⁶	
<i>English Language and Literature,</i> }	2 p.m.,	4 4 ⁶	{ PROF. DIXON and Mr. J. L. Morison.
<i>French Language and Literature,</i> }	9.45 a.m.,	4 4 ⁶	
<i>German² Language and Literature,</i> }	11.15 a.m.,	4 4 ⁶	{ M. Charles Martin. Dr. G.P.Thistlethwaite.
<i>German² (at the University),</i>	10 a.m.,	4 4 ⁶	
<i>Italian,</i>	3 p.m.,	4 4 ⁶	{ Dr. Agnoletti.
<i>Elementary (see p. 77),</i>	2 2	2 2	
<i>Logic,³</i>	12.15 p.m.,	4 4 ⁶	{ Dr. N. Smith.
<i>Logic,³ (at the University),</i>	9 a.m.,	4 4 ⁶	
<i>Moral Philosophy,⁴</i>	2 p.m.,	4 4 ⁶	{ PROF. LATTI. Mr. J. W. Scott.
<i>Moral Philosophy⁴ (at the University),</i> 8 a.m.,	8 a.m.,	4 4 ⁶	
<i>Political Economy (Do.),</i> 2 p.m.,	2 p.m.,	4 4 ⁶	{ PROF. JONES. PROF. SMART.
<i>Education (Do.),</i> 4 p.m.,	4 p.m.,	4 4 ⁶	
<i>History (Do.),</i> 10 a.m.,	10 a.m.,	4 4 ⁶	{ Mr. John Clark. PROF. MEDLEY.
<i>Mathematics,</i>	2 p.m.,	4 4 ⁶	
<i>Natural Philosophy,⁵ (Lectures) at Univ.,</i> 9 a.m.,	9 a.m.,	4 4 ⁶	{ PROF. JACK, Mr. Bell, and Mr. Picken.
<i>Natural Philosophy,⁵ (Lectures and Practical Work) at Univ. [Hours to be arranged]</i> 6 6	6 6	6 6	
<i>Natural Philosophy,⁵</i>	3 p.m.,	4 4 ⁶	{ PROF. GRAY.
<i>Physical Laboratory,</i>	Sat., 10 a.m. to 12 noon, }	4 4 ⁶	
<i>Chemistry,</i>	12 noon,	4 4 ⁶	{ Dr. H. W. Bolam.
<i>Chemical Laboratory,</i>	9 a.m. to 1 p.m., £3 3 to 5 5	5 5	

II.—MEDICINE.

THURSDAY, 18TH OCTOBER.

<i>Classes.</i>	<i>Hours.</i>	<i>Class Fees.</i>	
<i>Chemistry,</i>	12 noon,	£4 4 ⁶	{ Dr. H. W. Bolam.
<i>Chemical Laboratory,</i>	9 a.m. to 1 p.m., £3 3 to 5 5	5 5	
<i>Practical Chemistry,</i>	{ 9-11 a.m., Tues. and Thurs.,	3 3	
<i>Physics,</i>	{ 3 p.m., Mon., Wed., and Fri.,	3 3	
<i>Physical Laboratory,</i>	10-12, Saturdays,	3 3	{ Dr. T. H. Bryce.
<i>Anatomy, Junior,</i>	11 a.m.,	4 4 ⁶	
<i>Senior,</i>	3.15 p.m.,	4 4 ⁶	
<i>Practical Anatomy,</i>	9 a.m. to 5 p.m.,	3 3 ⁷	

¹ Women students may select either class of Greek.

² Women students may select either class of German.

³ Women students may select either class of Logic.

⁴ Women students may select either class of Moral Philosophy.

⁵ Women students may select any class of Natural Philosophy.

⁶ Fee for a second or subsequent session, £3 3s.

⁷ Students who have taken two winters and two summers of Practical Anatomy, as well as the Junior and Senior Lecture Courses, may afterwards enrol in Practical Anatomy at £1 1s.

<i>Classes.</i>	<i>Hours.</i>	<i>Class Fees.</i>	
<i>Physiology</i> ,	2 p.m., . . .	£4 4 ¹	{ PROF. M'KENDRICK and Muirhead Demonstrator.
<i>Materia Medica and Therapeutics</i> , . . . }	2 p.m., . . .	4 4 ¹	Dr. MacLennan.
<i>Pathology, Systematic</i> , . . .	8 a.m., . . .	4 4 ¹	Dr. Workman.
<i>Surgery</i> ,	4 p.m., . . .	4 4 ¹	Dr. Pringle.
<i>Practice of Medicine</i> , . . .	4 p.m., . . .	4 4 ¹	Dr. W. K. Hunter.
<i>Clinical Surgery</i> ,	9 a.m., (see Hospitals).		
<i>Clinical Medicine</i> ,	9 a.m., (see Hospitals).		
<i>Midwifery</i> ,	12 noon, . . .	4 4 ¹	{ PROFESSOR M. CAMERON and Dr. J. M. M. Kerr.

SUMMER SESSION 1907.

MEDICINE.

WEDNESDAY, 24TH APRIL.

<i>Classes.</i>	<i>Hours.</i>	<i>Class Fees.</i>	
<i>Botany</i> ,	8 a.m., . . .	£4 4 ¹	{ Dr. W. H. Lang.
<i>Practical Botany</i> (at University), 1 to 3 p.m., ²		3 3	
<i>Zoology, Elementary</i> (at University), 11 to 12 noon,		4 4 ¹	{ PROFESSOR KERR and Mr. Bles.
<i>Zoological Laboratory, Elementary</i> (at University), } 9 a.m. to 11 a.m., . . .		3 3	
<i>Practical Anatomy</i> ,	9 a.m. to 5 p.m., . . .	2 2 ³	{ Dr. T. H. Bryce.
<i>Embryology</i> ,	{ 11 a.m., Mon., Tues., Wed., Thurs., }	2 2	
<i>Practical Anatomy and Embryology</i> , if taken together,		3 3	
<i>Practical Pharmacy</i> ,	12 to 1 p.m., . . .	3 3	Dr. MacLennan.
<i>Practical Physiology</i> ,	2 p.m., . . .	3 3	{ PROF. M'KENDRICK and Muirhead Demonstrator.
<i>Forensic Medicine</i> (at University), 12.30 p.m., . . .		4 4 ¹	PROFESSOR GLAISTER.
<i>Practical Pathology</i> ,	10.30 a.m., . . .	3 3	Dr. Workman.
<i>Insanity</i> ,	{ 12 noon, Wed., University, and { at Gartnavel 1 day weekly.	2 2	Dr. Oswald.
<i>Diseases of the Eye</i> ,	{ 4 p.m., Tues. (in Ophthalmic Institute), and Fri. (in Queen Marg. College), and Clinique, 2 p.m. on Mon. and Thurs.	2 2	Dr. A. M. Ramsay.

HOSPITALS.—Royal Infirmary—First year, £10 10s. ; Second year, £10 10s. ; six months, £6 6s. ; three months, £4 4s. Royal Hospital for Sick Children—twelve months, £1 1s. Glasgow Maternity Hospital—£3 3s. Belvidere Fever Hospital, £1 1s.

SCIENCE CLASSES.—Of the subjects above enumerated the following are also in the Faculty of Science, viz.:—Mathematics, Natural Philosophy, Chemistry, Botany, Zoology, Anatomy, Physiology, and attendance upon the lectures and in the practical classes qualifies for graduation in Science.

The Honours Classes in Arts and the Higher Classes in Science at the University are open to women.

¹ Fee for a second or subsequent session, £3 3s.

² Students who are taking no class but Botany may take the Practical Class from 9 to 11 a.m., if notice of their wish to do so is given at the beginning of the session.

³ Students who have taken two winters and two summers of Practical Anatomy, as well as the Junior and Senior Lecture courses, may afterwards enrol in Practical Anatomy at £1 1s.

The arrangements for the classes in Queen Margaret College are similar to those of the classes for men, with the exception of English, French, German, Logic, Moral Philosophy, and Natural Philosophy, the arrangements for which are as follows :—

ENGLISH LANGUAGE AND LITERATURE.

Professor—W. M. DIXON, M.A., Litt.D., LL.B.

Lecturer—John L. Morison, M.A.

Assistant—Ritchie Girvan, M.A.

The class will meet daily, except on Saturday, at 2 p.m.

I. On Monday, Wednesday, and Friday throughout the session, lectures on the History of English Literature will be given, with special reference to (α) The Early English Drama from the beginning to Marlowe, (β) Certain Aspects of Shakespeare, and (γ) The French Revolution and its relation to English Literature, in prose and poetry.

II. On Tuesdays before Christmas lectures will be given on literary theory, and after Christmas lectures on Philology.

III. On Thursdays, throughout the session, lectures will be given on the Literature of the Seventeenth Century, with special reference to Dryden's *Absalom and Achitophel*, Part I., Pope's *Moral Essays*, and Swift's *Gulliver's Travels*.

In addition to the above special books, Shakespeare's *Hamlet* and *Antony and Cleopatra* and the *Golden Treasury of Songs and Lyrics* will be set for the degree, but those who prefer to study the English lyric in the *Oxford Book of Verse* may do so. Students may find the following books useful for the period of Literary History to be studied : J. A. Symond's *Predecessors of Shakespeare in the Drama* and Pollard's *Miracle Plays* ; Brande's *Shakespeare* and Bradley's *Shakespearean Tragedy* for the special books ; Courthope's *History of English Poetry* (the section dealing with the seventeenth century), with assistance on the prose writers from volumes in the *English Men of Letters Series*, such as Minto's *Defoe*, etc.

Students who have already taken the ordinary class are permitted to attend the Lectures on Monday, Wednesday, and Thursday or Friday, for a fee of £2 2s. Such attendance cannot be reckoned towards graduation.

For the Honours Class, see p. 73. *For the Nichol Memorial Prize, see Index.*

FRENCH LANGUAGE AND LITERATURE.

Lecturers.

1895. Alfred Mercier, L.-ès-L.

1898. CHARLES MARTIN, M.A. (Paris), O.A.

Assistant—Léon Pitoy, L.-ès-L. Phil., B.Sc. (Paris).

Students are advised to read the authors mentioned in the syllabus, and *not* to attend the French Language and Literature Class during the first year of their University course. Their work will be more thorough if it is done on a good English and classical foundation.

The class meets daily at 9.45 A.M. The work of the class includes the subjects stated in the syllabus of the class of French Language and Literature at page 74. A tutorial class meets for the improvement of pronunciation and the correction of exercises and essays.

A class library well provided with books of reference is open free to students from 9 a.m. till 5 p.m.

Students who take French for purposes of graduation must attend both classes, but students who do not intend to graduate may take the Language Class alone or the Literature Class alone. The fee for the Language Class alone or the Literature Class alone is £2 2s.

HONOURS CLASS.—See p. 75.

GERMAN LANGUAGE AND LITERATURE.

Lecturer—G. P. THISTLETHWAITE, B.A., Ph.D.

ORDINARY CLASS.—This class meets daily at 11.15 A.M., and the course, which extends to one hundred meetings, qualifies for graduation in Arts. The work of the class includes the subjects stated in the syllabus of the class of German Language and Literature at page 76.

Students who do not intend to graduate may take either the Literature Class or the Language Class alone. The fee for one class alone is £2 2s.

HONOURS CLASS.—See p. 76.

LOGIC.

Lecturer—NORMAN SMITH, M.A., D.Phil.

This class meets daily at 12.15 P.M., and the course, which extends to one hundred meetings, qualifies for graduation in Arts.

The work of the class includes the subjects stated in the syllabus of the class of Logic and Rhetoric at page 78.

MORAL PHILOSOPHY.

Lecturer—JOHN W. SCOTT, M.A.

This class meets daily at 2.45 P.M., and the course, which extends to one hundred meetings, qualifies for graduation in Arts.

The work of the class includes the subjects stated in the syllabus of the class of Moral Philosophy at page 79.

NATURAL PHILOSOPHY (PHYSICS).

Lecturer.

This class will meet daily at 3 P.M., except on Saturdays; also, for practical work, on Saturdays, 10 to 12. The course will include :—

(1) Experimental Physics (Properties of Matter, Sound, Heat, Light, Magnetism, Static Electricity, Voltaic Electricity, Electro-Magnetism), Mondays, Wednesdays, and Fridays. The Lectures will be fully illustrated by experiment.

(2) Theoretical Mechanics (Elementary Kinematics, Elementary Dynamics), Tuesdays and Thursdays.

(3) Practical Physics, Saturdays, 10 to 12. The students will work practically in the Laboratory, and will be taught the construction and use of physical apparatus generally, and will also be required to employ the various instruments, so as to verify natural laws and obtain numerical results.

Text-book.—Knott's *Elementary Physics* or Watson's *Physics*.

Students intending to take a Degree in Arts must take the whole course. The requirements of students preparing for Degrees in Medicine will be met by the first and third divisions of the course, and by attending four days weekly, viz., Mondays, Wednesdays, Fridays, and Saturdays.

VI.—*SPECIAL STUDY AND RESEARCH.*

In Ordinance No. 61, the Universities Commission (1889) made the following regulations for the encouragement of special study and research, and for the appointment of Research Fellows :—

I. It shall be in the power of the Senatus Academicus in each University, with the approval of the University Court, to make regulations under which graduates of Scottish Universities or of other Universities recognized by the University Court for the purposes of this ordinance, or other persons who have given satisfactory proof of general education and of fitness to engage in some special study or research, may be admitted to prosecute such study or research in the University.

II. It shall be the duty of the Senatus Academicus in each University—(1) To receive and decide upon all applications for admission to prosecute special study or research ; (2) To prepare a list of all persons so admitted (hereinafter referred to as Research Students) ; (3) To make regulations for the supervision of their work ; (4) To satisfy themselves from time to time that the Research Students are carrying on their work in the University in a satisfactory manner ; (5) To suspend or exclude from any course any student whose conduct or progress is unsatisfactory.

III. Every applicant for admission must send in to the Senatus Academicus a written application stating any degree or other distinction which he has already obtained, the line of study or research which he wishes to prosecute and the probable period of its duration, together with evidence as to his character, capacity, and general qualifications.

IV. Any application for admission shall be in the first instance referred by the Senatus Academicus to the appropriate Faculty, or to a Committee appointed by the Senatus ; one member of the Committee shall always be a Professor or Lecturer within whose department the proposed line of study or research falls. No applicant shall be recommended by the Faculty or the Committee who has not satisfied them by examination or otherwise that he is qualified to prosecute the proposed line of study or research, and further—(a) That his proposed line of study or research is a fit and proper one ;

(b) That he possesses a good general education ; (c) That he is of good character ; (d) That he proposes to prosecute his studies or research during a period to be approved by the Senatus Academicus. The Faculty or the Committee shall make a report to the Senatus Academicus upon each application. It shall also be their duty, subject to the regulations of the Senatus Academicus, to provide for the supervision of the Research Student's work, and to report at least once a year to the Senatus as to his progress and conduct. The Senatus shall then determine whether he shall remain a Research Student.

V. Every Research Student shall be required to matriculate each year, paying the ordinary fee.

VI. Research Students shall have access to and the use of the University Laboratories and Museums, under such conditions as to payment and otherwise as the University Court, after consultation with the Senatus Academicus, may determine.

Under this section the following regulations have been made:—1. In each laboratory each Research Student shall make payment of a sum which is estimated by the Professor as sufficient to cover the ordinary expenses incident to the Research Student's work. Apparatus and material beyond what is included in the ordinary operations of the laboratory shall be charged to the Student, unless the Professor judges that such apparatus and material will be a useful addition to the laboratory. But it shall be in the power of each Professor to propose to the University Court in any particular case that these payments may be remitted in whole or in part. 2. In all matters of discipline the Research Student shall be under the control of the Professor in whose laboratory he works. 3. All papers arising out of work done in a laboratory shall be submitted to the Professor before publication, and in all such publications a due recognition of the laboratory shall be inserted.

VII. The title of Research Fellow may be conferred by the Senatus Academicus, with the approval of the University Court, on Research Students who have shown special distinction. Such title shall not of itself confer any right to stipend, but it shall be in the power of the University Court to provide a stipend of such amount and for such period as it may think fit to any Research Fellow under the powers of Ordinance No. 25, Section XI., sub-section 8.

- VIII. (1) The Research Fellows shall be appointed as aforesaid after consideration of the report or reports submitted in terms of Section IV. hereof.
- (2) The title of Research Fellow may be conferred either at the commencement of the Research Student's course of study or research, or at any time during its progress, as the Senatus Academicus may determine.
- (3) Research Fellows shall retain their title and stipend, if any, for the period during which they are engaged in special study or research in the University, and no longer.
- (4) Research Students who have been appointed Research Fellows shall continue to be subject to the conditions above prescribed as to the supervision of their work and the reports to be made thereon.

IX. Nothing herein contained shall prejudice the right of Research Students to such Fellowships, Scholarships, or Prizes as may be open to them by Ordinance or Deed of Foundation.

X. The University Court may, subject to the provisions of Ordinance No. 25, Section XI., sub-section 8, provide such sums as it may think fit in aid of the expenses of special study or research.

RESEARCH WORK IN 1905-06.

Research Students.

W. B. I. Pollock, M.B., Ch.B.—Bacteriology of the *Conjunctiva* and the *Cornea*.

Hamilton C. Marr, M.D.—Enquiry into the nature of the Cerebro-Spinal fluid with special reference to Nervous Disease.

William P. McPherson, B.Sc.—The synthesis of Leucin and its transformation into Urea.

Kali C. Nandi, B.A., B.E. (Calcutta)—Armatures in direct current machines.

Thomas D. Mackenzie, B.Sc.—(1) The changes occurring in Uranium during radio-active change; (2) Investigation of certain radio-active minerals.

Alexander D. Ross—Experimental research on the Heusler Magnetic Alloys.

Robert Jack, M.A.—(1) The magnetic properties of various magnetisable alloys; (2) The detection of recovery from over-strain by experiments on the electric resistance and thermo-electric properties of various wires.

Edward P. Cathcart, M.D., Ch.B.—Concerning several of the factors which influence Proteid Metabolism.

R. Bruce Young, M.A., M.B., C.M.—On the Anatomy of the Joints.

SPECIAL TEACHING DONE BY SCHOLARS AND FELLOWS IN
1905-6.

William Manson, M.A. (*George A. Clark Scholar*)—Special class for Latin Prose in Winter; Course of twelve lectures to the Honours Class in Greek during the Summer Session.

Robert K. Goodfellow, M.A. (*Ewing Fellow*)—Latin Prose.

J. W. Scott, M.A. (*George A. Clark Scholar*)—Tutorial Course on Plato's *Republic*.

A. A. Bowman, M.A. (*Ewing Fellow*)—Honours Course of twelve lectures on Pre-Socratic Philosophy.

H. M. Trafford, M.A. (*Eglinton Fellow*)—Tutorial Course on Berkeley.

A. Pender Crichton, M.A. (*Scott Scholar*)—Tutorial Course on Berkeley.

Thomas M. MacRobert, M.A., B.Sc. (*Ewing Fellow*)—Differential Calculus, especially with reference to its applications to Tangents, Asymptotes, etc. Elements of Integral Calculus.

William Miller, M.A., B.Sc. (*George A. Clark Scholar*)—Tutorial Class in Mathematics.

Samuel N. Forrest, M.A. (*Eglinton Fellow*)—Course of eight lectures on Sound.

John R. Cameron, M.A. (*Luke Fellow*)—Course of six lectures on Thackeray.

VII.—THE CARNEGIE TRUST FOR THE UNIVERSITIES OF SCOTLAND.

This Trust was created by Mr. Andrew Carnegie of New York, and of Skibo in the County of Sutherland. By a trust-deed dated 7th June, 1901, Mr. Carnegie conveyed to Trustees \$10,000,000 Bonds by the United States Steel Corporation, bearing interest at 5 per cent., and directed that one-half of the net income should be applied towards the improvement and expansion of the Universities of Scotland in the Faculties of Science and Medicine, also for improving and extending the opportunities for scientific study and research, and for increasing the facilities for acquiring a knowledge of History, Economics, English Literature, and Modern Languages, and such other subjects cognate to a technical or commercial education as can be brought within the scope of the University curriculum, by the erection and maintenance of buildings, laboratories, class-rooms, museums or libraries, the providing of efficient apparatus, books, and equipment, the institution and endowment of Professorships and Lectureships, including post-graduate Lectureships and Scholarships, more especially Scholarships for the purpose of encouraging research, or in such other manner as the Executive Committee of the Trustees might from time to time decide.

It is directed that the other half of the income, or such part thereof as in each year may be found requisite, shall be devoted to the payment of the whole or part of the ordinary class fees exigible by the Universities from students of Scottish birth or extraction, and of 16 years of age or upwards, or scholars who have given two years' attendance after the age of 14 years at such schools and institutions in Scotland as are under inspection by the Scotch Education Department. They must have passed the examination qualifying for admission to the classes for which payment of fees is to be made by the Trust. Applications for the payment of fees must be made in the form prescribed by the Committee. The decision of the Committee in all questions of qualification shall be final, and the fees of all applicants declared to be eligible shall in each case be paid by the Committee as they become due to the factors or authorised officers of the Universities. The Committee shall

also have power to withhold payment of fees from any student who is guilty of misconduct, or who fails within a reasonable time to pass the ordinary examinations of the University or any of them. Any surplus remaining in any year from the income applicable to this head of expenditure shall be applied to the first head of expenditure. Extra-mural Colleges, Schools, or classes in Scotland, attendance at which is recognised as qualifying or assisting to qualify for graduation shall, on application, be entitled to participate under the first head of expenditure to such an extent as the Committee may from time to time determine, and the students thereof shall be admitted to the privileges of the second half. In the case of schools or institutions in Scotland established to provide technical or commercial education, the Committee may recognise classes which, though outside the present range of the University curriculum, can be accepted as doing work of a University level, and may allow them and the students thereof to participate under both heads of expenditure to such an extent as the Committee may from time to time determine.

Any surplus income which may remain after satisfying the preceding requirements is to be at the disposal of the Committee, who may expend it (1) in establishing or assisting to establish courses of lectures in convenient centres by Professors or Lecturers of the Universities or Extra-mural Colleges or Schools, in Science and the subjects before-mentioned; or (2) for the benefit of evening classes of students engaged in industrial or professional occupations during the day; or (3) in any other way the Trustees may think proper towards furthering the usefulness of the Universities in connection with the purposes expressed in the trust-deed and constitution. The benefits of the Trust are available to students of both sexes.

The Trustees are partly nominated, and there are also *ex officio* and elected members. The following are the nominated members:

The Right Hon. the Earl of Elgin and Kincardine, K.G., P.C., G.C.S.I., G.C.I.E., D.C.L., LL.D., *Chairman*.

The Right Hon. the Earl of Rosebery, K.G., P.C., K.T., D.C.L., LL.D., F.R.S.

The Right Hon. Lord Balfour of Burleigh, P.C., K.T., LL.D.

The Right Hon. Lord Kelvin, P.C., G.C.V.O., D.C.L., LL.D., F.R.S.

The Right Hon. Lord Kinnear of Spurness, one of the Senators of the College of Justice.

The Right Hon. Lord Reay of Reay, G.C.I.E., G.C.S.I., D.C.L., LL.D.

The Right Hon. Arthur James Balfour, M.P., D.C.L., LL.D.

The Right Hon. Sir Henry Campbell-Bannerman, M.P., G.C.B., LL.D.

The Right Hon. James Bryce, M.P., D.C.L., LL.D.

The Right Hon. John Morley, M.P., D.C.L., LL.D., F.R.S.

Sir Robert Pullar.

Sir Henry Enfield Roscoe, D.C.L., LL.D., F.R.S.

Richard Burdon Haldane, P.C., K.C., M.P., LL.D.

Thomas Shaw, K.C., M.P.

The following are the *ex officio* members :

His Majesty's Secretary for Scotland.

The Lord Provost of Edinburgh.

The Lord Provost of Glasgow.

The Provost of Dunfermline.

The elected members are four in number, one chosen by the University Court of each of the four Scottish Universities. They hold office for periods of four years, and are at present Principal Donaldson (St. Andrews), Professor Stewart (Glasgow), Professor Hay (Aberdeen), and Principal Sir William Turner (Edinburgh).

The administration of the Trust is conducted by an Executive Committee of nine members, one of whom is the Chairman of the Trust. Two of the four Trustees elected by the Universities are members of the Executive Committee for the first two years, the other two for the next two years, and so on.

The Executive Committee for the Academic year 1906-7 is as follows :

The Earl of Elgin and Kincardine, K.G., P.C., *Chairman*.

Lord Balfour of Burleigh, P.C., K.T.

Lord Kinnear of Spurness, K.C., LL.D.

Sir Henry Enfield Roscoe, D.C.L., LL.D.

Thomas Shaw, K.C., M.P.

The Lord Provost of Edinburgh, or an assessor nominated by him, after consultation and with the consent of the Trustees.

The Lord Provost of Glasgow, or an assessor nominated by him, after consultation and with the consent of the Trustees.

Professor Hay, M.D., Aberdeen.

Principal Sir William Turner, K.C.B., M.D., LL.D., Edinburgh.

The offices of the Trust are at the Merchants' Hall, Hanover Street, Edinburgh. *Secretary*, Dr. W. S. M'Cormick; *Treasurer*, Dr. John Ross. All applications should be addressed to the Secretary of the Trust.

The following excerpt from a letter written by Dr. Carnegie to the Earl of Elgin, Chairman of the Trust, explains the intention of the founder :—

“London, 7th June, 1901.

“My Dear Lord Elgin,

“As your Lordship is aware, my desire throughout has been that no capable student should be debarred from attending the University on account of the payment of fees. I believe that the conditions of application ensure a sufficient standard of merit, and I hope that the honest pride for which my countrymen are distinguished will prevent claims from those who do not require assistance, and that the invidious task of enquiring into the circumstances of each candidate need not be imposed upon the Trustees. But, to further mark my personal belief and hope in this matter, I have made provision in the Trust Deed that the Trustees may receive funds from others to be administered along with the funds placed by me. I consider this a valuable clause, believing, from my own experience with young men, that some students in after life may value the privilege of repaying advances received from the Trustees, although these are free gifts. I hope the Trustees will gladly welcome such repayments, if offered, as this will enable such students as prefer to do so to consider the payments made on their account merely as advances which they resolve to repay if ever in a position to do so, and that this will protect and foster the spirit of manly independence so dear to the Scot.

Very truly yours,

ANDREW CARNEGIE.”

PAYMENT OF CLASS FEES.

The following are the regulations for beneficiaries of the Trust under its provisions for the payment of Class Fees :

I. AGE.—A beneficiary must be over sixteen years of age.

II. NATIONALITY.—A beneficiary must be of Scottish Birth or extraction, or must have given two years' attendance after the age of fourteen at a school or institution under inspection of the Scotch Education Department.

∴ The Executive Committee admit the claim of Scottish extraction in the case of applicants who can give evidence of Scottish birth of either father or mother.

III. PRELIMINARY EDUCATION.—(1) In the FACULTY OF ARTS a beneficiary must have passed the Arts Preliminary and Entrance Examinations required for a complete course qualifying for an ordinary degree ; and, should he apply for the fee of a class for which an additional entrance examination is prescribed by Ordinance, he must also have passed this additional examination.

Note.—During the academic year 1906-7, the Executive Committee will consider claims for payment of fees from applicants in the Faculty of Arts who have passed in the four Subjects of the Arts Preliminary Examination, and have still to pass a supplementary entrance Examination on a higher standard in Latin, Greek, or Mathematics, before they can complete a course qualifying for an ordinary degree. But until this supplementary examination has been passed, a second application for fees will not be granted. Under this provision a separate application must be made on a special Form, which will be supplied by the Secretary.

In the FACULTY OF SCIENCE a beneficiary must have passed the Science Preliminary Examination appropriate to the degree in Pure or Applied Science for which he is studying.

In the FACULTY OF LAW a beneficiary must have passed the Arts Preliminary Examination.

In the FACULTY OF MEDICINE a beneficiary must have passed the Arts or Science Preliminary Examination, or have obtained the Leaving Certificate of the Scotch Education Department, and must have satisfied in either case the requirements of the Scottish Universities Joint Board as to Medical Preliminary Examination.

Note.—During the academic year 1906-7, the Executive Committee will consider claims for payment of fees from applicants in the Faculty of Medicine unable to satisfy fully the above conditions, provided (a) that they have obtained a pass in Science in the Leaving Certificate Examination of the Scotch Education Department, and have satisfied the requirements of the Scottish Universities Joint Board as to Medical Preliminary Examination; or (b) that they have completed a qualifying curriculum of study in the four subjects of the First Professional Examination, and have passed in two of these subjects. In case (b), fees already paid by applicants for qualifying attendance on Anatomy before they have completed their qualifying curriculum of study for the First Professional Examination may be refunded by the Trust when the First Professional Examination has been completed in accordance with Regulation IV. Under provisions (a) and (b) a separate application must be made on a special Form, which will be supplied by the Secretary.

In the FACULTY OF DIVINITY, a beneficiary must have completed a qualifying curriculum of study in the Faculty of Arts, and must have graduated in Arts or have passed in all but two of the subjects of examination required for graduation in Arts.

∴ In Regulation III, it is to be understood that examinations accepted by the Universities Joint Board of Examiners as equivalent in whole or in part to those named in the Regulation will be likewise accepted by the Trust.

IV. DEGREE EXAMINATIONS.—If, after he has had two opportunities of presenting himself for examination in any subject or group of subjects required for the ordinary degree proper to his curriculum of study, a beneficiary has not passed the said examination, no further payment of class fees shall be made on his behalf until he shall have passed it.

∴ Regulation IV. will also be enforced in the case of applicants who have given previous attendance on classes, but whose class fees have not previously been paid by the Trust.

V. ADVANCED AND HONOURS CLASSES.—Payment of class fees shall be confined to the class attendances required for a curriculum qualifying for an ordinary degree: provided that, in the case of applicants who have already passed the ordinary graduation examination or examinations in the relative subject or group of subjects, payment may be made of the fees of

Honours classes or of classes dealing with a distinct extension of the range of work belonging to the obligatory classes. Special application forms for fees of such classes will be supplied by the Secretary to applicants qualified under this regulation, except in the Faculty of Science, where special forms are not required.

VI. ATTENDANCES IN MORE THAN ONE FACULTY.—Unless a satisfactory reason is given, fees will not be paid for a course of study in more than one Faculty at a time, except so far as the classes attended may belong to more than one Faculty.

VII. REPORTS OF ATTENDANCE AND WORK.—A beneficiary comes under an obligation to submit to the Executive Committee at the end of each session particulars as to his attendance and work, any distinctions he may have gained, and any graduation examinations he may have passed.

VIII. CLASS CERTIFICATES.—A beneficiary also comes under an obligation to refund the fee of any class in which he has failed to obtain a certificate that he has given regular attendance and duly performed the work of the class during the session. No payment will be made of fees of classes in which such certificates are not issued by the teacher.

NOTE.—Applicants for Fees, in writing to the Secretary of the Trust for Application Forms, must name the University and Faculty in which they intend to study, and must state whether they have or have not previously obtained the benefits of the Trust.

POST-GRADUATE STUDY AND RESEARCH.

An important part of the Trust's operations concerns the endowment of Post-Graduate Study and Research, and the Executive Committee have issued certain Regulations defining the purposes for which Scholarships, Fellowships, and Grants in aid of Research are offered, and setting forth the conditions under which they may be held. Nominations for Scholarships and Applications for Fellowships and Grants, must be lodged with the Secretary not later than 1st May in any year. The final award of the Executive Committee will be announced in due course; and all Scholarships, Fellowships, and Grants awarded in any year shall date from 1st October, unless expressly stated otherwise.

A student who intends to graduate at the close of the summer session or opening of the winter session may be nominated for a Scholarship, or may apply for a Research Grant on or before the 1st May preceding; but he shall not be eligible to receive either until he has graduated.

The following are the regulations :—

I. SCHOLARSHIPS.

(a) *In Science and Medicine.*

The Executive Committee are prepared to consider applications for Carnegie Scholarships in Science and Medicine on the following conditions :

I. A Scholar must be a graduate of a Scottish University who desires to devote himself to higher study and research in some department of science or medicine.

II. A Scholarship shall be of the annual value of £100, payable by quarterly instalments in advance, the second and subsequent instalments being payable on the receipt of a satisfactory report by the Scholar and certificate from the authority under whose supervision the Scholar has been working. The Executive Committee reserve power to suspend or withhold payment, if not satisfied with the progress or conduct of the Scholar.

A Scholarship shall not be held along with any other scholarship or position of emolument, except with the sanction of the Executive Committee.

In the event of a candidate holding or obtaining any other scholarship or position of emolument, the Executive Committee may, in place of granting or continuing to grant a Carnegie Scholarship, supplement the amount of such scholarship or emolument so as to bring the income up to at least £100, the candidate thereby ranking, and coming under the same regulations, as a Carnegie Scholar.

III. A Scholar shall ordinarily be expected to devote his whole time to the purpose for which the Scholarship is awarded. If he proposes to undertake other work during his tenure of the Scholarship, he must define such work precisely, and obtain the sanction of the Executive Committee.

IV. A Scholarship shall ordinarily be tenable for one year ; but it may be renewed for a second year, if the Executive Committee deem this expedient.

V. A candidate must be nominated by a Professor or Lecturer in a Scottish University, or by a Teacher in Scotland recognised for the purpose of graduation by a Scottish University, under whose supervision, unless other supervision be approved by the Executive Committee, he shall work during his tenure of the Scholarship.

The Nomination Form, to be signed by the nominator and the candidate, must contain information on the following points, all of which will be taken into consideration in estimating the relative claims of candidates :

(1) The age of the candidate, his career as a student, and his knowledge of modern languages.

(2) His special fitness for the work proposed.

(3) His programme of study and research during his tenure of the Scholarship, and where and under whose supervision he proposes to work.

(4) Whether the candidate proposes to undertake other work during his tenure of the Scholarship ; and, if so, the character of the work proposed, and the demand on his time which it will involve.

(5) Whether the candidate holds, or expects to hold, any other scholarship or position of emolument ; and if so, particulars of the amount and duration of such scholarship or emolument.

(6) The names of two or more authorities, other than the nominator, to whom the Executive Committee may refer as to the qualifications of the candidate.

The nominator must, if required, satisfy the Executive Committee that the candidate, if appointed to a Scholarship, will be provided with the facilities and supervision necessary for carrying out his programme of study and research, and that such information will be furnished on his progress and conduct as may seem expedient to the Executive Committee.

VI. By accepting a Scholarship a Scholar comes under an obligation to submit such reports on the progress of his work as the Executive Committee may require.

VII. Nomination Forms may be had from the Secretary to the Carnegie Trust, The Merchants' Hall, Hanover Street, Edinburgh, to whom all communications must be addressed.

(b) *In History, Economics, and Modern Languages and Literature.*

The Executive Committee are prepared to consider applications for Carnegie Scholarships in History, Economics, and Modern Languages and Literature on the following conditions:

I. A Scholar must be a graduate of a Scottish University, preferably with Honours in at least one of the Groups :

History, Economic Science, English, Modern Languages and Literature, who desires at home or abroad to devote himself to higher study and investigation within the scope of these groups of study.

II. A Scholarship shall be of the annual value of £100, payable by quarterly instalments in advance, the second and subsequent instalments being made payable on the receipt of a satisfactory report by the Scholar and certificate from the authority under whose supervision the Scholar has been working. The Executive Committee reserve power to suspend or withhold payment, if not satisfied with the progress or conduct of the Scholar.

A Scholarship shall not be held along with any other scholarship or position of emolument, except with the sanction of the Executive Committee.

In the event of a candidate holding or obtaining any other scholarship or position of emolument, the Executive Committee may, in place of granting or continuing to grant a Carnegie Scholarship, supplement the amount of such scholarship or emolument so as to bring the income up to at least £100, the candidate thereby ranking, and coming under the same regulations, as a Carnegie Scholar.

III. A Scholar shall ordinarily be expected to devote his whole time to the purpose for which the Scholarship is awarded. If he proposes to undertake other work during his tenure of the Scholarship, he must define such work precisely, and obtain the sanction of the Executive Committee.

IV. A Scholarship shall ordinarily be tenable for one year; but it may be renewed for a second year, if the Executive Committee deem this expedient.

V. A candidate must be nominated by a Professor or Lecturer in a Scottish University, under whose supervision, unless other supervision be approved by the Executive Committee, he shall work during his tenure of the Scholarship.

The Nomination Form, to be signed by the nominator and the candidate, must contain information on the following points, all of which will be taken into consideration in estimating the relative claims of candidates:

(1) The age of the candidate, and his career as a student, including particulars as to his general culture and his proficiency in the above-named groups of study.

- (2) His special fitness for the work proposed.
- (3) His programme of study and investigation during his tenure of the Scholarship, and where and under whose supervision he proposes to work.
- (4) Whether the candidate proposes to undertake other work during his tenure of the Scholarship ; and, if so, the character of the work proposed, and the demand on his time which it will involve.
- (5) Whether the candidate holds, or expects to hold, any other scholarship or position of emolument ; and if so, particulars of the amount and duration of such scholarship or emolument.
- (6) The names of two or more authorities, other than the nominator or nominators, to whom the Executive Committee may refer as to the qualifications of the candidate.

The nominator must, if required, satisfy the Executive Committee that the candidate, if appointed to a Scholarship, will be provided with the facilities and supervision necessary for carrying out his programme of study and investigation, and that such information will be furnished on his progress and conduct as may seem expedient to the Executive Committee.

VI. By accepting a Scholarship a Scholar comes under an obligation to submit such reports on the progress of his work as the Executive Committee may require.

VII. Nomination Forms may be had from the Secretary to the Carnegie Trust, The Merchants' Hall, Hanover Street, Edinburgh, to whom all communications must be addressed.

II. FELLOWSHIPS.

(a) *In Science and Medicine.*

The Executive Committee are prepared to consider applications for Carnegie Fellowships in Science and Medicine on the following conditions :

I. A Fellow must be a graduate of a Scottish University who has given evidence, preferably by work already published, of capability to advance science or medicine by original research, and who desires to devote himself further to this work.

II. A Fellowship shall be of the annual value of £150, exclusive of such special expenses in connection with his research as the Executive Committee may allow. Payment shall be made by half-yearly instalments in advance ; but the

Executive Committee reserve power to suspend or withhold payment, if not satisfied with the progress or conduct of the Fellow.

A Fellowship shall not be held along with any other fellowship or position of emolument, except with the sanction of the Executive Committee.

In the event of a candidate holding or obtaining any other fellowship or position of emolument, the Executive Committee may, in place of granting or continuing to grant a Carnegie Fellowship, supplement the amount of such fellowship or emolument so as to bring the income up to at least £150, the candidate thereby ranking, and coming under the same regulations, as a Carnegie Fellow.

III. A Fellow shall ordinarily be expected to devote his whole time to the purpose for which the Fellowship is awarded. If he proposes to undertake other work during his tenure of the Fellowship, he must define such work precisely, and obtain the sanction of the Executive Committee.

IV. A Fellowship shall ordinarily be tenable for two years, the extension to a second year being dependent on the receipt of a satisfactory report by the Fellow on his work during the first year; but it may be renewed for a third year, if the Executive Committee deem this expedient.

V. A candidate must furnish the Executive Committee with information on the following points, all of which will be taken into consideration in estimating the relative claims of candidates:—

(1) His age, his career as a student, and his knowledge of modern languages.

(2) His special fitness to conduct the research proposed, and his previous experience, along with any published accounts of work already done.

(3) His programme of research during his tenure of the Fellowship; where he proposes to work; and whether he proposes to work independently or in collaboration.

(4) Whether he proposes to undertake other work during his tenure of the Fellowship; and, if so, the character of the work proposed, and the demand on his time which it will involve.

(5) Whether he holds, or expects to hold, any other fellowship or position of emolument; and if so, particulars of the amount and duration of such fellowship or emolument.

(6) The names of two or more authorities to whom the Executive Committee may refer as to his qualifications.

(7) An estimate, as detailed as is possible, of special expenses, if any, required in connection with the research he proposes to undertake.

VI. By accepting a Fellowship a Fellow comes under an obligation to submit such reports on the progress of his work as the Executive Committee may require.

The publication, in some form, of an account of the results of his research will be expected in all cases.

VII. Application Forms may be had from the Secretary to the Carnegie Trust, The Merchants' Hall, Hanover Street, Edinburgh, to whom all communications must be addressed.

(b) In History, Economics, and Modern Languages and Literature.

The Executive Committee are prepared to consider applications for Carnegie Fellowships in History, Economics, and Modern Languages and Literature on the following conditions:

I. A Fellow must be a graduate of a Scottish University, preferably with Honours in at least one of the Groups: History, Economic Science, English, Modern Languages and Literature, who desires to investigate at first-hand, at home or abroad, some historical, social, economic, or educational problem or factor of modern civilisation, and who can give evidence by his previous career and general culture, and also preferably by work already published, of capability to advance knowledge by his proposed investigation.

II. A Fellowship shall be of the annual value of £150, exclusive of such special expenses in connection with his investigation as the Executive Committee may allow. Payment shall be made by half-yearly instalments in advance; but the Executive Committee reserve power to suspend or withhold payment, if not satisfied with the progress or conduct of the Fellow.

A Fellowship shall not be held along with any other fellowship or position of emolument, except with the sanction of the Executive Committee.

In the event of a candidate holding or obtaining any other fellowship or position of emolument, the Executive Committee may, in place of granting or continuing to grant a Carnegie

Fellowship, supplement the amount of such Fellowship or emolument so as to bring the income up to at least £150, the candidate thereby ranking, and coming under the same regulations, as a Carnegie Fellow.

III. A Fellow shall ordinarily be expected to devote his whole time to the purpose for which the Fellowship is awarded. If he proposes to undertake other work during his tenure of the Fellowship, he must define such work precisely, and obtain the sanction of the Executive Committee.

IV. A Fellowship shall ordinarily be tenable for two years, the extension to a second year being dependent on the receipt of a satisfactory report by the Fellow on his work during the first year; but it may be renewed for a third year, if the Executive Committee deem this expedient.

V. A candidate must furnish the Executive Committee with information on the following points, all of which will be taken into consideration in estimating the relative claims of candidates:—

(1) His age, and his career as a student, including particulars as to his general culture and his proficiency in the above-named groups of study.

(2) His special fitness to conduct the investigation proposed, and his previous experience, along with any published accounts of work already done.

(3) His programme of investigation during his tenure of the Fellowship; where he proposes to work; and whether he proposes to work independently or in collaboration.

(4) Whether he proposes to undertake other work during his tenure of the Fellowship; and, if so, the character of the work proposed, and the demand on his time which it will involve.

(5) Whether he holds, or expects to hold, any other fellowship or position of emolument; and if so, particulars of the amount and duration of such fellowship or emolument.

(6) The names of two or more authorities to whom the Executive Committee may refer as to his qualifications.

(7) An estimate, as detailed as is possible, of special expenses, if any, required in connection with the investigation he proposes to undertake.

VI. By accepting a Fellowship a Fellow comes under an obligation to submit such reports on the progress of his work as the Executive Committee may require.

A Fellow will be expected to submit for publication a thesis or memoir upon the results of his investigation.

VII. Application Forms may be had from the Secretary to the Carnegie Trust, The Merchants' Hall, Hanover Street, Edinburgh, to whom all communications must be addressed.

III. GRANTS IN AID OF RESEARCH.

The Executive Committee are prepared to consider applications for Grants in aid of Research on the following conditions:—

I. An applicant for a Research Grant must be a Professor, Lecturer, or Assistant in a Scottish University, a Teacher in Scotland recognised for the purpose of graduation by a Scottish University, or a Scottish University Graduate resident in Scotland.

II. A Research Grant is not intended to take the place of such provision as the University Courts may make out of the Grants for Permanent Equipment under the Scheme of "Grants for five years to the four Universities of Scotland."

III. An applicant must furnish the Executive Committee with information on the following points, all of which will be taken into consideration in estimating the relative claims of applicants:—

(1) His experience in research, with copies of or references to any published papers, or, if he has no papers to offer, with references to two or more authorities who are acquainted with his qualifications.

(2) The nature of the research in which he desires to engage, and the results expected to follow therefrom.

(3) The period over which the proposed research is likely to extend, and the approximate amount of time which he expects to be able to devote to it.

(4) A statement of special requirements for the proposed research, with a detailed estimate of the cost.

(5) Whether he has received, or is receiving, any grant from any other source for the same object; and if so, what results have already ensued from his investigations.

IV. By accepting a Grant an applicant comes under an obligation to send to the Executive Committee, when required, a report containing—(a) a brief statement (not necessarily for

publication) showing the results arrived at, or the stage which the inquiry has reached ; (b) a statement of the expenditure incurred ; and (c) copies of or references to any papers in which results of the research have been printed.

The publication, in some form, of an account of the results of the research will be expected in all cases. In the publication of any work for which financial assistance has been received from the Trust, due acknowledgment of such assistance shall be made, and Scholars and Fellows under this Scheme shall use the title "Carnegie Research Scholar" and "Carnegie Research Fellow" respectively.

V. Instruments of permanent value purchased by means of the grant shall, at the conclusion of the research or at such other time as the Executive Committee may determine, be placed under the care and at the disposal of the institution in which the research has been conducted, provided that the Executive Committee may, if they see fit, request their return.

All apparatus of permanent value provided by the Trust for purposes of research shall be labelled and catalogued as belonging to the Trust, and an account of such apparatus shall be sent annually to the Executive Committee.

VI. An application for a Grant to two or more collaborators in the same research must be signed by each ; but they shall appoint one of their number who shall be responsible for furnishing the report, for receiving and disbursing the money, and in general for the conduct of the research.

VII. Application Forms may be had from the Secretary to the Carnegie Trust, The Merchants' Hall, Hanover Street, Edinburgh, to whom all communications must be addressed.

The following Graduates of Glasgow University have been appointed to Carnegie Scholarships and Fellowships :—

Scholars :—1903—Thomas B. Morley, B.Sc. (Physical) ; Alexander Matheson, M.A., B.Sc., M.B., Ch.B. (Pathological) ; M. Logan Taylor, M.B., Ch.B. (Pathological). 1904—Robert T. Leiper, M.B., Ch.B. (Biological) ; Janie H. M'Ilroy, M.A., B.Sc., M.B., Ch.B. (Pathological) ; William G. Rodger, M.B., Ch.B. (Pathological). 1905—Thomas D. Mackenzie, B.Sc. (Chemical) ; Robert D. Watt, M.A., B.Sc. (Agricultural) ; Muriel Robertson, M.A. (Biological) ; Janie H. M'Ilroy

M.A., B.Sc., M.B., Ch.B. (Pathological); Ivy M'Kenzie, M.A., B.Sc., M.B., Ch.B. (Pathological); Constance H. M. Archibald, M.A. (Economical).

Fellows:—1904—Dougald B. M'Quistan, M.A., B.Sc. (Physical). 1905—Carl H. Browning, M.B., Ch.B. (Pathological); Dougald B. M'Quistan, M.A., B.Sc. (Physical); Alfred Walter Stewart, B.Sc. (Chemical).

VIII.—LIBRARIES, MUSEUM, BOTANIC GARDEN.

UNIVERSITY LIBRARY.

The University Library was founded in the fifteenth century. It contains an extensive and valuable collection of books. The Librarian is appointed by the University Court. The Library is under the immediate superintendence of a Committee consisting of three members of the University or others, not being members of Senate, appointed by the University Court, and of six members of Senate appointed by the Senate. All reports by this Committee are, in the first instance, received by the Senate, and the Senate has power, subject to the review of the University Court, to confirm, modify, or reject the recommendations in such reports.

The Library is always increasing by donations and by a grant of £707 per annum, formerly paid by the Treasury, as compensation for the loss of the Stationers' Hall privilege, and now received from the University Court. It receives also a grant of £100 annually for scientific periodicals from the Bellahouston Trustees. The Carnegie Trust has allocated to the library a grant of £1000 for each of the five years from 1st January, 1903.

During recent years the Library has acquired several valuable collections. Amongst these the most important are the following:—

The Collection bequeathed to the University by the late W. EUNG, Esq., amounting to about 15,000 volumes. It contains many books printed in the fifteenth and sixteenth centuries, illustrated books, English literature, Classics, above 2,000 Bibles, and a very large number of Psalm and Hymn books.

The library of the late SIR WILLIAM HAMILTON, Professor of Logic in the University of Edinburgh, amounting to about 8,000 volumes. This collection, which consists principally of

Classics, editions of Aristotle, and treatises on Logic and Metaphysics, was purchased by private subscription and presented to the University. A list of the subscribers was inserted in the *Calendar* for 1879-80.

The WALKER-ARNOTT Botanical library of 970 volumes.

The Musical library of the late THOMAS L. STILLIE, Esq., numbering 760 volumes. It contains the works of the chief composers, many of them in score, and an extensive series of modern operatic compositions, continental and English.

The collection of books on Palestine, which belonged to the late DR. A. B. M'GRIGOR, consisting of 655 volumes of works, illustrating the natural and civil history, topography, and antiquities of Jerusalem and the Holy Land. This collection was presented along with 83 volumes, containing about 1,000 pamphlets, by Alexander M'Grigor, Esq.

The library of the REV. A. K. MACCALLUM, LL.D., containing over 3,000 volumes, bequeathed to the University—along with an annual sum of £10 to be spent on its increase—as the nucleus of a Celtic library.

A collection of works, numbering over 600 volumes, relating to Mediaeval Philosophy, which formed part of the library of the late PROFESSOR VEITCH—presented by Mrs. Veitch.

A selection, consisting mainly of theological works and amounting to about 3,800 volumes, from the library of the late REV. ALEXANDER ROBERTSON, who also left the residue of his means to found a lectureship in the University in defence of the Christian religion; 800 volumes of general literature from the library of the late F. A. ECK, Esq.; over 1,000 volumes—selected from the library of the late JAMES HOTSON, merchant—presented by DR. THOMAS REID; 700 volumes, including extensive histories of the Netherlands, books on universities and schools, and many theological works, presented by Professor J. E. B. MAYOR, D.D.; a complete copy of Migne's *Patrologia* in 388 volumes, presented along with an oak book-case by the subscribers as a memorial of the late Dr. W. P. DICKSON, Curator of the Library; about 500 volumes from the library of the late Professor HASTIE, D.D.; and 640 Volumes (including 60 Volumes containing 1121 Pamphlets) published at the University Press—presented by JAMES MACLEHOSE, Esq., M.A., F.S.A.

The custody and management of the Library are regulated

by Ordinance No. 64, and by the rules framed under that Ordinance and approved by the University Court on 14th November, 1895. The following are the principal regulations relative to the use of the Library:—

Books shall not be given out except to the borrower in person, or to some one having written authority from him.

It shall be in the power of the Librarian at any time to withdraw any work from circulation, subject to appeal to the Library Committee; and to call in any book from any borrower after the lapse of the period for which such borrower is entitled to retain it, upon receiving a written request to do so from any person entitled to the use of the Library. In the notice of recall a period of not less than three clear days shall be allowed for making the return, and the penalties leviable for neglect shall be specified in the notice.

The following classes of work, viz.:—Manuscripts, rare books or books in any way difficult to be replaced, works of reference, separate maps or plates, unbound music or parts of works, pamphlets or books not sufficiently protected by the binding, shall not be given out except on an order of, and under conditions to be fixed by, either (a) the Senate, (b) the Library Committee, or (c) three Members of the Library Committee, according as, in the discretion of the Librarian, the special circumstances of each case may require.

Each member of the following classes of readers shall be allowed to borrow, and to have in his, or her, possession at one time the under-mentioned number of volumes, but not more:—

Each Member of the *Senatus Academicus*, thirty volumes.

Each University Lecturer, twenty volumes.

Each Assistant and Examiner, and each holder of a Teaching Fellowship, fifteen volumes.

The Librarian, ten volumes; and each Assistant-Librarian, five volumes.

Each Extra-Academical Teacher, recognized by the University Court in the town in which the University is situated, ten volumes.

Each retired Principal or Professor, ten volumes.

Each Member of the University Court, during his tenure of office, ten volumes.

Each Member of the General Council of any Scottish University (and each Graduate under the age of twenty-one years) in each year in which he, or she, shall have paid a subscription to the Library of ten shillings and sixpence, six volumes.

Provided that no Member of the University Court or of the General Council shall be entitled to obtain from the University Library books required by the teachers or students of the University in the prosecution of academic work and research, and that it shall be in the discretion of the Librarian, subject to appeal to the Library Committee, to decide from time to time what books are so required.

Any Member of the General Council of any Scottish University shall

be allowed to compound for the Library subscription by a singlepayment of Five Guineas, which shall secure to him, or her, for life the same privileges as would accrue from the annual payments.

It shall be in the power of the Library Committee from time to time to grant the use of the Library to persons who may not be Members of the University, for purposes of literary research, and the names of those privileged readers shall be reported annually to the University Court. All grants under this section shall terminate with the close of the reading year, but shall be renewable if again applied for. Each special reader shall pay an annual subscription of ten shillings and sixpence, and shall be entitled to borrow six volumes at one time, but not more.

Subject always to the provision as to the return of books for the annual inspection, all persons entitled to the use of the Library under the foregoing regulations shall have the right to retain each book borrowed during the winter session for one month, and each book borrowed during the summer session for two months, from the date of borrowing; and may further retain each book until it shall have been recalled by the Librarian.

Every Matriculated student, or other Student admitted by ordinance to the use of the Library, shall be entitled to have in his, or her, possession at one time, during the winter session, four volumes but not more, and during the summer session and vacation, six volumes but not more. Every student shall have the right—subject to the return of books for the inspection—to retain any book during the winter session for two weeks, and during the summer session for four weeks, from the date of borrowing, and may further retain each book until it shall have been recalled by the Librarian. But no student shall be permitted to borrow any book from the Library until he, or she, shall have lodged with the Librarian a deposit of £1 in security for the due return of the books and the payment of any fines which may be incurred.

During the winter session such students only as are attending the English Literature classes shall be allowed to borrow works of fiction in English, and then only to the extent of two volumes at one time. During the summer session and vacation students may borrow three volumes of fiction at one time, but not more.

The reading term for Students, Members of General Council, and Special Readers, shall begin with the commencement of the winter session in each year, and terminate with the close of the autumn vacation following.

Readers shall not be allowed to borrow books in more than one capacity.

A general inspection of the Library shall take place in April, beginning with the seventh, and continuing for eight lawful days thereafter.

All works whatever, and by whomsoever borrowed, shall be returned to the Library before the beginning of the period of the annual inspection under the penalties hereinafter mentioned. The Library shall be wholly closed during the time of the inspection.

If any person shall retain any volume after the commencement of the period of the annual inspection, such person shall incur a fine of one

shilling for each volume ; and in the event of any volume not being returned before the close of one week after the last day of the inspection, the fine shall be repeated from week to week until the volume is returned, or until the total amount of the fine shall have reached the sum of ten shillings.

If any person, when required by the Librarian to return a book, shall fail to do so before the expiry of the time specified in the notice, such person shall incur a fine of one shilling for each volume, and thereafter a further penalty of sixpence per day so long as the volume is not returned, or until the total amount of the fine shall have reached the sum of ten shillings.

The Librarian is instructed forthwith to report to the Library Committee all cases in which he shall find that books have been mutilated, disfigured by writing on the margin, or otherwise injured, while in the possession of readers ; and persons guilty of such offences shall be liable to replace the injured books, and shall be fined or suspended from the privileges of the Library at the discretion of the Committee.

So long as any Library subscription or any fine incurred remains unpaid, and so long as any person continues in possession of a book which he is not entitled to retain, the right of the defaulter to the use of the Library shall be suspended and remain in abeyance.

All readers borrowing books from the Library must obtain them from, and return them to, the Assistant-Librarians in the ante-room on the days and during the hours when the Library is open.

Persons other than students who wish to consult books in the Library will be accommodated in the First Bay of the Lower Hall.

Visitors on giving their names will be conducted over the Library by an attendant.

The Library is open for the borrowing and return of books on Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays from 10 till 5 o'clock, except during the months of July and August when it is open from 10 till 2. On Saturdays it is open from 10 till 1, except in the months of July and August when it is wholly closed. The Library is closed during the time of the Annual Inspection in April. During the Christmas holidays it is open from 10 till 3 o'clock, except on Christmas and New Year's Days and on Saturdays.

Additional Regulations approved by the University Court on 1st October, 1903 :—

1. The members of the Court, the Library Committee and the Teaching Staff and all readers (other than matriculated students) entitled to borrow books without payment of subscription, shall have the privilege of free access to the open shelves and to the recent numbers of current periodicals, during the hours when the Library is open.

2. Similar free access shall also be given to matriculated Research Students and to such Carnegie Scholars and Fellows as become members of the University, provided in all cases that they shall have first become readers in the Library and made the usual deposit.

3. The same privileges may be granted to a limited number of matriculated Students who shall be specially recommended to the Library Committee as likely to make a good use of them, on the following conditions :

(a) The recommendation shall be in writing. It must be signed by a University Professor or Lecturer and bear that it is based on personal knowledge. All recommendations shall cease to be valid at the end of the Autumn Vacation.

(b) No recommended Student shall be admitted to free access unless he is a member of the Library, and has made the usual deposit.

4. Members of the Library Committee and readers under the second of these Additional Regulations shall be allowed to borrow ten volumes at one time, but not more.

The following regulations made by the Library Committee in regard to borrowing books from the Simson and the Hamilton collection, were reported to the Senate on 1st December, 1904 :—

Subject to the general restrictions upon, and regulations regarding, the borrowing of books from time to time in force—

(1) No book shall be lent out of the Simson Collection without an express order, in writing, of the Library Committee.

(2) Any Professor, Lecturer, or University Assistant in the Department of Mental Philosophy in the University shall be entitled to borrow from the Hamilton Collection, on presenting a requisition in writing to the Librarian for the book or books wanted.

CATALOGUES.

The General Alphabetical Catalogue may be consulted in the Catalogue Room by Readers, on application to the Librarian.

Students and Graduates who are engaged in special research may, on similar application, have access to the Classified Catalogues. These catalogues were arranged by the late Professor Dickson, who held the office of Curator of the Library, and the expenses incurred by him in connection with their preparation were defrayed by the late Dr. A. B. M'Grigor.

READING-ROOM.

In connection with the Library, a Reading-Room, provided with a special collection of books of reference for the use of Matriculated Students, is open for readers, Saturdays and holidays excepted, during the winter session from 9 A.M. till 4 P.M., and during the summer session from 9 A.M. till 2 P.M.

The Room is primarily intended for readers consulting the books of the Special Collection ; but, so far as the accommodation will allow, students may make use of it for individual private study. The following are the principal rules applicable to the Room :—

Every Matriculated Student who shall at the beginning of the session or thereafter record (in a book kept by the Librarian) his desire to use the Reading-Room in accordance with the rules for consulting of books or private study, will receive a voucher entitling him to admission. No student will be admitted to the use of the Room without possessing a voucher.

All readers are required to abstain from talking, whispering, or any other form of distracting or disturbing others, and to enter and leave the Room (and Vestibule) with as little noise as possible. Readers shall exhibit their vouchers when asked ; and shall at once give their names and matriculation numbers, if they shall be requested to do so.

Each student, desirous of borrowing books from the Special Collection in the Vestibule, is required to fill up one of the receipt papers with his name, matriculation number, and the title of the book or books wanted, and to present it to the Assistant-Librarian in charge. Students are not permitted to have the use of more than two volumes at one time. The books received are to be used only in the Reading-Room, and are to be returned by the receiver himself into the hands of the Assistant-Librarian. The return of books by those who have to leave the room at the end of any hour is to be made not later than five minutes before that time, and during that interval no books will be given out.

Books of reference not included in the Special Collection, but contained in the General Library, may be obtained for consultation in the Reading-Room on presenting a paper with the name and matriculation number of the reader making the request, and the title of the book wanted, to one of the Assistant-Librarians in the Library.

The Assistant-Librarian in charge, Mr. William G. Macdonald, is instructed to report at once to the Library Committee the name of any student transgressing the rules.

Donations to the University Library.

List of Donations from 1st March, 1905, to 28th February, 1906.

- Académie des Sciences de Cracovie.—Bulletin international. Math.-Nat. Classe. 1905.—Phil.-Hist. 1905.—Catalogue of Polish scientific literature. V. 1, 2.
 Académie de Neuchâtel.—Niedermann. Contributions à la critique et à l'explication des gloses latines.
 Accademia delle scienze fisiche e matematiche di Napoli.—Atti. Serie 2^a. XII.—Rendiconti. Serie 3^a. XI. 1905.—Indice generale. 1737-1903.
 Accademia dei Lincei, Roma.—Atti. Classe di scienze fisiche. 5^a serie. V.—Rendiconti. Classe di scienze fisiche. XIV. 1905.—Classe di scienze morali. XIV. 1-6.

- Accademia Pontaniana, Napoli.—Atti. XXXV. 1905.
- Mr. W. Innes Addison.—Register of members of the General Council of Glasgow University.
- The Admiralty.—Greenwich Observations. 1902.—Photo-heliographic results. 1902.
- Annals of the Cape Observatory. XI.—Report of the health of the navy. 1904.
- Mr. and Mrs. James A. Allan.—Young, Evolution and design.
- Amalgamated Press, Ltd., London.—The "Daily Mail" year book, 1906.
- American Society of Arts and Sciences.—Proceedings. XLI. 14, 15.
- American Exchange National Bank.—The Clearing House, New York.
- American Historical Association.—Annual report, 1903. 2 vols.
- P. J. Anderson, LL.B.—Aberdeen University studies. 12-15.—Report of the Geddes Memorial proceedings at King's College.
- Professor R. J. Anderson, Galway.—Some notes on the Cetacea of the Irish Atlantic coast.—A note on the persistence of trade impressions.
- M. Auguste Angellier.—Dans la lumière antique.
- Anonymous.—Leask, Dr. Thomas M'Lauchlan, M.A., LL.D.
- Army Medical Department.—Report for the year 1903.
- Asiatic Society of Bengal.—Bibliotheca Indica. N.S. Nos. 1099-1127.—Notices of Sanskrit MSS. Extra No.
- Australian Museum.—Report of the Trustees. 1903-4.
- Mr. Alexis V. Babine.—The Yudin Library, Krasnoïarsk, Siberia.
- Mr. J. G. A. Baird.—Chronicon Carsonis. 1610.—Pauli Aeginatae Opera, 1567.—Claubergii et Hundii Disputationes.—Heerebood, Meletemata philosophica.—Vedelius, De arcanis Arminianismi lib. II.—Walaëus, Enchiridium religionis Reformatae.—Hornii Orbis politicus.—Wendelini Institutium politicarum lib. III.—Petavii Rationarium temporum.—Lucae de Linda Descriptio orbis, and 23 volumes of other works published in the 17th and 18th cents.
- Baird Trust, Glasgow.—Charteris, Church of Christ. 2 copies.
- Batavia Observatory.—Magnetic and meteorological observations. XXVI.—Regenwaarnemingen. 1904.
- Rev. W. Holman Bentley, D.D.—Pioneering on the Congo. 2 vols.—Dictionary and grammar of the Kongo language, and appendix.—Kongo New Testament.
- Berwickshire Naturalists' Club.—History of the Berwickshire Naturalists' Club. Vol. XIX., part 1.
- Mr. Erskine Beveridge.—Coll and Tiree.
- Bibliotheca da Universidade de Coimbra.—Archivo Bibliographico. V., VI. 1.
- Biblioteca Nazionale Centrale di Firenze.—Bollettino. 49-60.
- Bibliothèque Royale de Belgique.—Liste des Ouvrages imprimés acquis en 1905.—Catalogue des Manuscrits. 4.
- Bibliothèque de l'Université Royale a Christiania.—Aarsberetning. 1899-1900. 1902-3. Forelaesninger. 1901. II. 1905. I.—Jahrbuch. 1900-3—Aarbog. 1896-1900.—Archiv 26. I.-IV.—Winge, Sindssygelovgivning.—Rygh, Personnavre.—Nielsen, Grev. Wedel. 3 vols.—Borthen, Blindenverhältnisse.
- Bibliothèque de l'Université d'Utrecht.—7 Dissertations.
- Executors of the late H. R. Bishop's Estate, New York.—Investigations and studies in jade. 2 vols.
- Board of Education.—Geology of Mid-Argyll, explanation of sheet 37.—Colour-printed maps.—Sheet 232, Devezes.—Sheet 299, Winchester.—The geology of West-Central Skye with Soay.—Church, Precious stones.—Catalogue of the loan exhibition of process engraving.—Catalogue of prints. II. Modern etchings and aquatints.—Statistics of public education.—Regulations for secondary schools.—Regulations relating to the colleges of science and art, 1st Jan. to 31st July.—Regulations for evening schools.—Reports from University Colleges. 1905.—Report of the Board of Education for the year 1904-5.—National Competition. 1905.—Results of the art examinations. April. May. June.—Results of science examination. April. May. June.—Science examination papers. 1905.—Art examination papers. April. May. June.—List of students of science classes. 1905.—J. A. McNeill Whistler's etchings, etc., in the National Art Library.
- Bohemian Society of Clinical Medicine.—Archives. VI.
- Boston Public Library.—Monthly Bulletin. 1905.—Annual list of additions. 1904-5.
- Mr. James Brand, F.S.A.—Life and writings of Rev. Thomas Innes.
- British and Foreign Unitarian Association.—Herford, A brief account of Unitarianism.—Bowie, Unitarian Churches in Great Britain and Ireland.
- Brooklyn Institute of Arts and Sciences.—Cold Spring Harbor monographs. 3-5.—Science bulletin. 5-7.
- Botanical Society of Edinburgh.—Transactions. XXII. 4; XXIII. 1.

- Dr. R. Broom.—4 papers from the Transactions of the South African Philosophical Society. Dec. 1904 and Jan. 1905.
- Brown University, U.S.A.—Bulletin. II. 4.
- John Brownlee, M.D.—Report, City of Glasgow fever and smallpox hospital, Belvidere, 1904.—Biographical sketch of James B. Russell, M.D., LL.D.
- Dr. Bruce.—14th annual report of the health of the County of Ross and Cromarty.
- M. Bruno.—*Theorie exacte et notation finale de la musique.*
- Thomas H. Bryce, M.A., M.D.—*Histology of the blood of the larva of Lepidosiren paradoxa.* Part 2.
- Budapest Statistical Bureau.—Publications XXXIII.; XXXVI.; XXXVII.—*Statistisches Jahrbuch.* 1902, 1903.
- Bureau of Education, Washington.—*Annual report.* 1904.
- Bureau of American Ethnology.—Bulletin. 28.—21st annual report.—22nd annual report, parts 1, 2.
- Bureau of Standards, Washington. Bulletin. I. 1, 2.
- Rev. Thomas Burns, D.D.—*The Benefice Lectures.* 1904.
- Calendar, programmes or reports have been received from the following institutions:—Aberdeen University; Armstrong College, Newcastle-upon-Tyne; Bombay University; Brown University, U.S.A.; Canterbury College, N.Z.; City and Guilds Technical College, London; Columbia University, N.Y.; College of Preceptors; Dalhousie University; Durham College of Medicine; Durham University; École pratique des Hautes Études, Paris; Edinburgh University; Glasgow and West of Scotland Technical College; Guy's Hospital Medical School; Hartford Theological Seminary, Conn.; Heriot-Watt College; Imperial University, Russia; King's College, London; Leland Stanford Junior University; McGill University; McGill University, Faculty of Medicine; Magyar Tudományos Akadémia; Melbourne University; New Zealand University; Northwestern University, U.S.A.; Pharmaceutical Society; Presbyterian College, Halifax; Princeton University; Queen's University, Dublin; Queen's College, Belfast; Queen's College, Cork; Queen's College, Galway; Royal College of Physicians, Edinburgh; Royal Institute of British Architects; Royal College of Surgeons of England; Royal Holloway College; Royal Albert Memorial College, Exeter; Royal University of Ireland; Trinity College of Music; Transvaal Technical Institute; Technische Hochschule, Aachen; School of Medicine, Royal Colleges, Edinburgh; Università di Padova; Universidad de la Habana; Université de Paris; Università di Roma; Universiteit te Utrecht; Université de Nancy; Università di Pisa; Università di Torino; University of Adelaide; University of Birmingham; University of Budapest; University of Calcutta; University of Cape of Good Hope; University College, Nottingham; University College, London; University College of North Wales; University College, Dundee; University College, Bristol; University College of South Wales; University College of Wales; University of Iowa; Université de Jassy; University of Leeds; University of London; University of Michigan; Michigan College of Mines; University of Nebraska; University of Otago; University of Sydney; University of Toronto; University of Vermont; University of Liverpool; Victoria University, Manchester; Victoria University, Canada; Victoria College, Cape Town; Wesley College, Winnipeg; Wigan Mining and Technical College; Yale University.
- Caledonian Medical Society.—*Caledonian medical journal.* VI. 4, 5.
- Cambridge Philosophical Society.—*Proceedings.* XIII. 2, 3.—*Transactions.* XX. 1-6.
- Canadian Institute.—*Transactions.* VIII. 1.
- Cape of Good Hope Observatory.—*Report for 1904.*
- Carnegie Institution, Washington.—*Publications.* Nos. 4, 6-25, 27-31, 35-38, 41-43, 45.—*Bibliographical Index of North American Fungi.*—*Explorations in Turkestan.*—*Contributions from the solar observatory.* No. 2.—Hale, Solar research at Mt. Wilson, California.—*Year-book.* No. 3. 1904.
- Carnegie Trust for the Universities of Scotland.—*Fourth and fifth annual reports.*
- Dr. E. P. Cathcart.—*On the antitryptic action of normal serum, and four other papers.*
- Central Experimental Farm, Ottawa.—*Bulletin.* Nos. 49, 50.
- Central Asian Society.—*Suyematsu, Chinese expansion historically reviewed.*
- Carlotta Bozzolo Ved. Ceradini, Opere. 2 vols.
- Ceylon Marine Biological Laboratory.—*Hornell, Biological results of the Ceylon Pearl Fishery,* 1904.
- Dr. A. K. Chalmers.—*Progress of sanitation in Great Britain.* 1905.
- Chartered Accountants of Scotland.—*Official directory,* 1905-6.
- The City Chamberlain, Glasgow.—*Municipal accounts.* 1904-5.

- Alexander Clark, M.A.—Molecular forces and Newtonian laws.
 John Burton Cleland, M.D.—The ancient family of Cleland.
 Clinical Society of London.—Transactions. 38.
 Clydesdale Horse Society.—Clydesdale stud-book. 27.
 College of Engineering, Tokyo.—Journal. II. 1.
 College of Medicine, Tokyo.—Mitteilungen. VI. 3.
 College of Science, Tokyo.—Journal. XX. 3-10.—Memoirs. I. 2.
 Columbia University, New York.—University Quarterly. VII. 2-3. VIII. 1.—Payne, Elementary school curricula.—23 dissertations for the degree of Doctor of Philosophy.
 Dr. J. Colville.—A theory of education.
 Commercial Cable Company.—Soundings taken by the Telegraph Construction Co. from 8th June to 2nd July, 1905.
 Congrès international de la Tuberculose à Paris, 1905.—La lutte contre la Tuberculose en Suède. 1905.
 Conseil pour l'Exploration de la mer, Copenhagen.—Publications de circonstance. 13, 21-26, 28, 32.—Bulletin des résultats. 1904-5.—Rapports et procès-verbaux. III.
 Corporation of Glasgow.—Museums and Galleries Report. 1904.
 M. Pierre de Coubertin.—La chronique de France. 1904.
 Mr. John Coutts.—The divine inheritance.
 Dr. J. M. Cowan.—Blair's Lectures, and 23 other volumes.
 Rev. L. M. Dalton, M.A.—Drexel, Rule of all human actions.
 Rev. J. Fairley Daly, M.A.—The Livingstonia Mission report for 1904.
 John Davidson, D.Phil.—A new interpretation of Herbart's psychology.
 Delegates of the Press, Oxford.—P. Papini Stati Silvæ.
 Department of the Interior, Canada.—Relief map.—Resource map.
 Department of Mines, Victoria, B.C.—Annual report of the Minister of Mines. 1904.
 Department of Public Health, Sydney.—Thompson, Report on a third outbreak of plague at Sydney, 1903.
 Deputy Clerk Register.—Register of the Privy Council. Vol. VI. 2nd ser. 1635-1637.
 Dr. George Dickson.—Tuberculosis. III. 5-8.
 Direction générale de Statistique de Buenos Aires.—Annuaire. 1905.
 Dr. Dumas.—Lettres à un jeune homme qui veut étudier la médecine.
 Dr. Henry Dyer.—Dai Nippon.—The fifth financial and economical annual of Japan. 1905.
 Earthquake Investigation Committee, Tokyo.—Publications in foreign languages. Nos. 19-21.
 Dr. G. M. Edebohls.—Surgical treatment of Bright's disease.
 The Editor.—Buddhism. II. 1.
 The Editor.—The Quarterly Register. VII. 9.
 The Editor.—Schoolmasters year-book and directory. 1905.
 Edinburgh University.—List of additions to Library. 1904.
 Edinburgh Mathematical Society.—Proceedings. 23.
 Elie Ducommun.—L'inutilité des guerres démontrée par l'histoire.
 Engineering Standards Committee.—Report on progress of work. 1905.
 Dr. James Erskine.—Old Glasgow hospitals.
 Ethnological Survey, Manila.—Publications I. ; II., parts 2-3; IV. 1.
 Mr. Alfred Dudley Evans.—British railways and goods traffic.
 Mr. James C. M. Fairlie—Kelly, History of the Church of Christ. 2 vols.
 Fairmount Park Art Association, Philadelphia.—33rd annual report. 1905.
 Charles E. Fawsitt, D.Sc.—Viscosity of aqueous solutions, and 6 other chemical papers.
 Henry Faulds, L.F.P.S.—Guide to finger-print identification.
 Miss Adela M. Fielde.—Power of recognition among ants, and 4 other pamphlets.
 Miss M. E. Galloway.—Galloway, Isaiah's testimony for Jesus.—Egypt's record of time.—Shadow of the sundial.—Chalk and flint formation.—Physical facts and scriptural record.—Science and geology.—Chain of ages.—Ezekiel's sign.—The lost Atlantis and the Flood.
 F. J. Gant, F.R.C.S.—From our dead selves to higher things.—Modern natural theology.
 Victor Geisler.—Was ist Philosophie? Was ist Geschichte der Philosophie?
 General Assembly of the Church of Scotland.—Report of schemes. 1905.
 General Conference of the New Church.—The New-Church magazine. 1905.
 Geological Survey of Canada.—Contributions to Canadian palæontology. Vol. III.

- Geological Survey of India.—Records. XXXI, part 4; XXXII., parts 1-4.—Memoirs. Vol. II., No. 2.
- George Washington University.—Bulletin. III. 3, 4; IV. 1-4.
- Professor Gibson, LL.D.—An old Berwickshire town.
- Glasgow Archaeological Society.—Transactions. N.S. V. 1.
- Glasgow Corporation Tramways.—Abstract of income and expenditure. 1905.
- Glasgow Obstetrical and Gynaecological Society.—Transactions. IV.
- Government of Bengal.—Annals of Royal Botanic Gardens, Calcutta. X. 2.—Kurukh, Folk-lore in the original—Descriptive catalogue of Sanskrit MSS. in the library of the Calcutta Sanskrit College.—Notices of Sanskrit MSS. 2nd ser. II. 2; III. 1.
- Government of Bombay.—Progress report of the Archaeological Survey.
- Government of Madras.—Catalogue of Sanskrit MSS. Vol. I. 3.—The private diary of Ananda Ranga Pillai. Vol. I.—Hultzsch, Reports on Sanskrit MSS. in Southern India.
- Government of the North Western Provinces.—Report of archaeological work. 1904-5.
- Government of the United Provinces and the Punjab.—Annual progress report. 1905.—Book of photographs and drawings.
- Government of Mysore.—Epigraphia Carnatica. X., XII.
- Governor of Ceylon.—Governors' addresses. 1890-1903.
- Miss Mary Hallock-Greenewalt.—Pulse in verbal rhythm.
- Professor John W. Hales.—Folia litteraria.
- Harvard University.—Ryder, Oriental series. Vols. V., VI., IX.—Bibliographical contributions. No. 56.—Quinquennial catalogue of Harvard University. 1636-1905.
- C. O. Hawthorne, M.D.—The ophthalmoscope in medical practice.
- Rev. A. C. Henderson, B.D.—Introduction to astronomy.
- William H. Hill, LL.D.—Reference catalogue of books, etc., in the library at Barlanark.
- Historical and Antiquarian Society of Bradford.—The Bradford Antiquary. Vols. I., II. N.S. I, II.
- Thomas Erskine Holland, D.C.L.—Neutral duties in a maritime war.
- Mr. G. L. Houston, J.P.—Quarterly journal, Geological Society. LXI., parts 1, 2.—Geological literature added to the Geological Society Library during 1904.
- Imperial Department of Agriculture, West Indies.—Pamphlet series. Nos. 33, 34, 36, 37, 38.—West Indian bulletin. V. 4; VI. 1, 2.
- Imperial Navy, Tokyo.—Annual report. 1902.
- Imperial University of Tokyo.—Ancient Japanese records. I.-VI.—Ancient Japanese documents in the monasteries of Koyasan. I., II.—Chronicles of Japan. 4th ser. Vols. 1-3; 6th ser. 1-4; 12th ser. 1-6.
- Glasgow Incorporation of Weavers.—Old Glasgow weavers.
- Institute of Accountants and Actuaries in Glasgow.—A history of accounting and accountants, edited by R. Brown, C.A. Edition de luxe copy.
- Institution of Civil Engineers.—Minutes of proceedings. CLIX.-CLXII.
- Institute of Chemistry of Great Britain and Ireland.—Register of Fellows, Associates and Students.
- Institution of Mechanical Engineers.—Proceedings. 1904. No. 5; 1905. Nos. 1-3.—List of members. 1905.
- Institution of Engineers and Shipbuilders of Scotland.—Transactions. XLVIII.
- Institution of Naval Architects.—Transactions. XLVII. 2 parts.—Index to Transactions. Vols. I.-XLVI.
- Iowa Geological Survey.—Annual report. 1904.
- James Murray's Asylum, Perth.—75th annual report.—Excelsior. January, April, July. 1905.
- J. A. Jenkins, B.A.—Cardiff and its history.
- Johns Hopkins University.—American journal of mathematics. XXVII. 2.—Hollander, Financial history of Baltimore.—University circulars. Nos. 2-7. N.S. Nos. 1-8.—Modern language notes. Vols. XII.-XVIII.—Bulletin. No. 179.—Martin, The miocene gastropod fauna of Maryland, and 31 other dissertations.
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DIVINITY HALL LIBRARY.

This Library is set apart for the special use of students in Divinity. It contains an extensive collection of Theological works. It is supported chiefly by an annual grant from the University Court of Seven Shillings for each student attending the Divinity classes.

The Librarian is elected annually by the students attending the Hall.

HUNTERIAN MUSEUM.

This Museum was founded by the eminent William Hunter, M.D., who was born in 1718, at Cantieswell or at Long Calderwood, in the Parish of East Kilbride, Lanarkshire. (See *William Hunter: Physician, Anatomist, Founder of the Hunterian Museum*, by Professor John Young, M.D.) By his will, dated 1783, he bequeathed to the Principal and Professors of the College, and their successors in office, his valuable collection of books, manuscripts, coins, paintings, anatomical preparations, zoological and mineral specimens, and archaeological relics, and also a sum of £8,000, the greater part of which was spent on the erection of a building for their reception and preservation.

This building, erected in 1804, became the property of the Union Railway Company, as explained at page 32. But accommodation has been provided for the collections in the new buildings at Gilmorehill. The Museum occupies the north side of the eastern quadrangle, and consists mainly of two halls, the upper of which is galleried. With Dr. Hunter's collections there are incorporated the University collection of Roman

inscriptions from the Antonine Vallum, and many important donations that have from time to time been received from friends of the University. Conspicuous among such additions are the Eck collection of minerals and precious stones, the minerals and antiquities presented by Miss Brown of Lanfine, and the contents of the Zoological and Ethnological Museum formerly attached to the Andersonian University.

The Museum contains:—(1) Medical Preparations, (2) Zoological Specimens, (3) Mineral Specimens, (4) Books, Manuscripts, Coins, Paintings, and Archaeological Objects.

The following catalogues of portions of the collections have been published:

1. *Stevenson Catalogue of Greek Coins.* 3 vols. By Geo. Macdonald, M.A. With 102 plates. Price £9 9s.
2. *Tituli Hunteriani: Catalogue of Roman Stones.* By James Macdonald, LL.D. Price 10s. 6d.
3. *Bellahouston Catalogue of Anatomical and Pathological Preparations.* By J. H. Teacher, M.B., C.M. 2 vols. 8vo. Price to students, 2s.

James Stevenson, Esq., of Hailie, defrayed the cost of the Catalogue of Greek Coins, and the Bellahouston Trustees that of the Anatomical Catalogue. The Catalogue of the Printed Books is completed in Manuscript. A complete Catalogue of the MSS. is being prepared for publication.

The whole Museum is under the immediate superintendence of the Museums Committee, consisting of two members of the University or others, not being members of Senate, appointed by the University Court, and of four members of Senate, appointed by the Senate. All reports by this Committee are, in the first instance, received by the Senate, and the Senate has power, subject to the review of the University Court, to confirm, modify, or reject the recommendations in such reports.

The Museum is now open to the public, free of charge, on Monday, Wednesday, and Friday, from 10 A.M. to 4 P.M. in winter, 10 A.M. to 5 P.M. in summer. A charge of three-pence for each person is made for admission on Tuesday, Thursday, and Saturday.

Donations to Museum.

The following donors have contributed to the Museum during the past year :—

Mr. E. J. Bles.—Collection of Zoological (including Palaeontological) specimens from South America.

The Rev. Professor Cooper.—*Stylaster roseus*.

Dr. Frew.—*Neomenia curinata*; *Bufo calamita* (2 specimens); *Doris tuberculatus*.

Dr. S. F. Harmer.—*Rhabdopleura*.

Professor Haswell.—*Phoronis*.

Dr. Beath Henderson.—Collection of Reptiles, mainly from West Indies.

Dr. W. J. Holland, Carnegie Museum, Pittsburg.—Cast of the hind limb of the skeleton of the gigantic extinct Reptile *Diplodocus Carnegiei*.

Professor Graham Kerr.—Developmental Series of *Lepidosiren*; Nest of Weaver bird.

Professor Ray Lankester.—*Cephalodiscus*.

Sir William MacGregor, K.C.M.G.—Foetus of *Myaptera*; specimens of *Pennula balaenoptera*, various specimens of parasites, viscera, bones, etc., from seals and whales.

Mr. Alexander Mackay, Partick.—*Bufo vulgaris*; *Rana vulgaris*.

Mr. John Mackay.—*Rana temporaria* (two specimens).

Mr. Robert Mackay.—*Turdus viscivorus* (stuffed).

Professor M'Kendrick.—Fresh-water Sponge from the river Zambesi.

Mr. E. S. Macphie.—Edible Frog (two specimens) from Brittany; Grass Snake; Green Lizard; *Molge Palmata*.

Mr. Scott Maxwell.—Collection of about 10,000 Insects.

Mr. John Mulgrew.—*Petromyzon marinus*.

Mr. W. J. Rutherford.—Embryo; *Lacerta vivipara*.

Lady Reid, 22 Royal Terrace, Edinburgh.—Medallion portrait of George Anderson, Glasgow.

The Rev. W. Holman Bentley, D.D.—Collection of Flint Implements from the Congo.

Mr. Alexander Martin.—Maori mat (unfinished).

Mr. Thomas Weir, B.D.—Three Spears and one Woomera from Western Australia.

The Rev. Dr. Robertson.—Section of dark oak Pile of the Campanile of St. Mark's, Venice.

Valuable gifts of microscopic preparations and materials have also been received from Dr. Logan Taylor, Dr. I. H. Teacher, and Professor Woltreck.

BOTANIC GARDEN.

A piece of ground adjoining the old College was for many years set apart as a Botanic Garden, for the use of the Lecturer on Botany; but the great increase of manufactories and other buildings in its vicinity having rendered it unfit for such a purpose, the University, in 1817, agreed to subscribe £2000 towards the formation of a new Botanic Garden then projected

by the citizens of Glasgow, on condition that a Lecture-Room should be erected within it for the exclusive use of the Professor of Botany and his pupils—that every facility should be given them in prosecuting the study of Botany—and that three Directors of the Institution should be annually appointed by the Faculty of the College, to represent and protect the interests of the University. The Garden to which this agreement referred was completed and opened to the public in 1819. A Lecture-Room, in which the Professor of Botany delivered an annual course of Lectures during the summer months, was built; and the collection of plants, from the zeal and ability of the Superintendent, and the favourable situation of Glasgow, had become one of the richest and most valuable in the island. The extension of the town again compelled the removal of the Garden to its present site in Hillhead, at a greater distance from the old College, so that the Professor, while he continued to give in it the practical portions of the course (*Demonstrations*), found it more convenient to deliver his Lectures at the University. The removal of the University to Gilmorehill brought it nearer the Botanic Garden, but the Lecture-Room in the Garden being inadequate for the students attending the course of Elementary Lectures on Botany, and there being no Laboratory, Museum, or Herbarium-Room in the Garden, the Professor has continued to deliver his Lectures and to have his Laboratory at the University. Suitable buildings for the Botanical department have now been erected within the University grounds, and include Lecture Room, Museum, Herbarium, Laboratories, and other rooms.

MARINE BIOLOGICAL ASSOCIATION OF THE WEST OF SCOTLAND.

The station of the Association is situated near Keppel Pier, in the island of Cumbrae, and was opened in May, 1897. A constitution was adopted at a meeting of the Association held on 15th January, 1901. The chief object which the promoters have in view is to afford opportunities for the investigation of the Marine Fauna and Flora of the district

known as the Clyde Sea Area, or of other parts of the West Coast of Scotland. A practical laboratory has been provided and equipped, and one of the tables in it, for which the University Court subscribes, is called the University Table. The nomination of students to the privilege of working at this table is made by the Senate on the report of the Professors of Zoology and Botany. Applications should be addressed to the Clerk of Senate.

IX.—GRADUATION IN THE SEVERAL FACULTIES.

EXAMINERS.

Preliminary Examinations in Arts, Science, and Medicine.

The University Court of each University annually appoints as Examiners such number of Professors or Lecturers in the Faculty of Arts in that University, and such additional Examiners as may be deemed necessary. The Preliminary Examinations in Arts, Science, and Medicine are conducted by these Examiners, under the control and supervision of a Joint-Board appointed in January of each year by the several University Courts from among the Examiners, according to a scheme of rotation prescribed in Ordinance No. 13, Section IV., as supplemented by Ordinance No. 43, Section I.

The Joint-Board holds office from the first day of February to the thirty-first day of January in the succeeding year, and sits at each University in rotation in the following order :—Edinburgh (1905-6), Glasgow (1906-7), Aberdeen (1907-8), St. Andrews (1908-9). It consists of eight Professors or Lecturers and eight additional Examiners, two Professors or Lecturers and two additional Examiners being appointed by the University Court of each University, according to the scheme printed on p. 204. In the case of a candidate at a Preliminary Examination who is permitted to offer himself for examination in any language not included in the Preliminary Examination, each University makes special arrangements for the examination of its own candidates.

Degrees in Arts.

The Examiners for Degrees in Arts are the Professors whose subjects qualify for Graduation in Arts, together with such Lecturers in the University and such additional Examiners appointed by the University Court as the University Court may deem necessary.

Degrees in Science.

The Examiners for Degrees in Science are the Professors whose subjects qualify for Graduation in Science, together with such Lecturers in the University and such additional Examiners appointed by the University Court as the University Court may deem necessary.

Degrees in Medicine.

The Examiners for Graduation in Medicine are the Professors whose subjects qualify for Graduation in Medicine, together with such Lecturers in the University and such additional Examiners appointed by the University Court as the University Court may deem necessary, such provision being made as will ensure that every candidate shall be examined in each subject by at least two Examiners, one of whom shall not be a Professor or Lecturer in the University.

No person is eligible for appointment to the office of additional Examiner, whether for Preliminary Examination or for Degrees in Arts, Science, or Medicine, who is a Professor, Lecturer, or University Assistant or Demonstrator in any Scottish University, and the appointment of any additional Examiner during the currency of his term of office to a Professorship, Lectureship, or to the office of University Assistant or Demonstrator in any Scottish University is held to vacate his office of Examiner. The periods of appointment of additional Examiners are so adjusted as to secure that all the Examiners shall not vacate their office at the same time; but no Examiner can be appointed for a longer period than four years, and no person who has held the office of Examiner for a period of three or four years is eligible for reappointment to the office of Examiner in the same University until he has ceased to hold the office of Examiner in such University for not less than one year.

In the event of a vacancy in the office of a member of the Joint-Board, or of an Examiner or additional Examiner in Arts, Science, or Medicine, occurring otherwise than by expiration of his term of office, the person appointed in his room is appointed for the remainder of such term only.

Degrees in Law.

The Examiners for the Degree of Bachelor of Laws are the Professors of or Lecturers on the subjects included in the examinations for the said degree, and additional Examiners appointed by the University Court.

The Examiners for the Degree of Bachelor of Law are the Professors of or Lecturers on the subjects included in the examinations

for the said degree, and additional examiners appointed by the University Court.

Degrees in Divinity.

The Examiners for the Degree of Bachelor of Divinity are the Professors of or Lecturers on the subjects included in the examinations, and two additional Examiners appointed by the University Court.

REGULATIONS FOR GRANTING DEGREES.

1. GRADUATION IN ARTS.

REGULATIONS APPLICABLE TO ALL WHO HAVE ENTERED ON THEIR ACADEMICAL COURSE SINCE 1ST OCTOBER, 1892.

The conditions on which the Degree of Master of Arts is now conferred are regulated by Ordinances No. 11,¹ No. 44, No. 148, No. 160, and No. 168 of the Universities Commission (1889), the principal provisions of which are the following :—

I. The Academical year in each University shall commence on the first day of October. The classes shall meet for the winter session (which shall include not less than twenty teaching weeks) on such day thereafter as the Senatus of each University shall determine; and shall close not later than the tenth day of the following April.

The University Court of each University shall institute a summer session in such of the subjects or branches of subjects qualifying for graduation in Arts as may be determined by the said Court after consultation with the Senatus. Such session shall commence on such day as the Senatus of each University shall determine, and shall include ten teaching weeks at least. The classes shall be conducted by the Professors, or by Lecturers appointed under Ordinance No. 17 (Regulations as to Assistants and Lecturers).

II. The Curriculum for the Degree of Master of Arts (M.A.) shall extend over not less than three winter sessions, or two winter sessions and three summer sessions.

PRELIMINARY EXAMINATION.²

III. (1) Before entering on the Curriculum (subject to the proviso contained in Section IV., Sub-section 1) each student shall pass a Preliminary Examination in the following subjects :—

1. English.
2. Latin or Greek.³
3. Mathematics.

¹ This ordinance was printed in full in the *University Calendar* for 1892-93, pp. 477-485, and the modifications made by Ordinance No. 44 were inserted in italics in the *University Calendar* for 1894-95.

² Supplementary Regulations issued by the Joint Board on 31st January, 1906, have been inserted in smaller type at the points in the ordinances to which they relate.

³ See Section XXI. on page 219.

4. One of the following :—Latin or Greek (if not already taken), French, German, Italian (or such other language as the *Senatus Academicus* may approve), Dynamics.

Under this sub-section the Senate has approved of (1) Japanese, (2) Spanish. Any candidate who proposes to be examined in Japanese or Spanish or in any other language than the six mentioned in the Ordinance is required to make intimation to the Senate before 1st Feb. or 1st July for the Spring and Autumn Examinations respectively.

(2) The examination must be passed in the matters and on the standards hereinafter defined; but there shall be a higher and a lower standard in Latin and in Greek, and a higher, an intermediate, and a lower standard in Mathematics.

Candidates must pass on the higher standard in at least one of these three subjects, and may pass on the lower standard in either or both of the remaining two; subject always to the conditions relative to attendance contained in Section IV. hereof.

(3) English shall include Grammar and Composition, and the outlines of Geography and British History, and the standard shall not be lower than that presently adopted for the Higher Grade Leaving Certificate of the Scotch Education Department.

In the case of a foreign student, whose native language is other than English, the standard required in English in the Preliminary Examination shall be such as the Joint-Board of Examiners may deem sufficient.

The Joint-Board has issued the following directions showing the character of the papers to be set in English :—

English will include (a) Grammar, (b) Composition, (c) Literature, (d) History, and (e) Geography.

- (a) Grammar will include Analysis, Parsing, Derivation, and Correction of Sentences.
- (b) Composition will include an Essay and Paraphrasing.
- (c) Literature will comprise a knowledge of certain prescribed books of two or three writers. Questions requiring a general knowledge of the life and works of the greater writers will not be set; but one or two questions may be set, giving an opportunity to candidates who have read widely in English Literature to show their knowledge. The prescribed books will be :—For 1906, Shakespeare, *As You Like It*; Scott, *Woodstock*; Hazlitt, *Essays on Poetry* (edited by D. Nichol Smith). For 1907, Shakespeare, *A Midsummer Night's Dream*; Miss Austen, *Emma*; *Golden Treasury* (1st series) Books II. and IV.; Carlyle, *Heroes and Hero Worship*.
- (d) History will include a knowledge of one of the three following periods, questions in each of which will be set in each examination, viz. : The outlines of the History of both England and Scotland (a) from the Roman Occupation to 1603; (b) from 1603 to the Union of the Parliaments in 1707; (c) from the Union of the Parliaments to the Reform Bill of 1832.
- (e) Geography will include a general knowledge of the Geography of the World and a special knowledge of the Geography of the British Empire.

(4) Latin and Greek shall comprise grammatical questions, translation into English from Latin or Greek authors not previously prescribed, and translation of plain passages or easy sentences from English into Latin or Greek. The higher standard shall not be lower than that presently [before October, 1892] adopted in the examination for a Curriculum of three sessions, or for the Higher Grade Leaving Certificate of the Scotch

Education Department, and the lower standard shall not be lower than that presently adopted for the Lower Grade Leaving Certificate of the said Department.

The Latin examination on the higher standard will include Translation, Prose Composition, Grammar, and Sentences.

The Greek examination on the higher standard will include Translation, Sentences (or an easy passage of continuous English Prose, set either as an alternative or as a substitute), and Grammar.

The passages for translation both from Greek and Latin will include Prose and Verse.

The Latin examination on the lower standard will include Translation and Parsing, Prose Composition, Grammar, and Sentences.

The Greek examination on the lower standard will include Translation, Sentences, and Grammar.

In the Latin and the Greek papers both on the higher and lower standards, candidates are required to satisfy the Examiners both in Composition and in Translation.

Candidates who, having taken in Latin or Greek the examination on the higher standard, have failed to pass on that standard, but have obtained a percentage of marks equivalent to a pass on the lower standard, may be held by the Board to have passed the examination on the lower standard. But those to whom it is important to obtain a lower pass in the event of failure for the higher, are advised to take the lower paper.

(5) French, German, and Italian shall comprise grammatical, literary, and easy philological questions, translation into English from French, German, or Italian authors not previously prescribed, and translation from English into French, German, or Italian; and the standard shall not be lower than that presently adopted for the Higher Grade Leaving Certificate of the Scotch Education Department.

In the examination to be held in Sept.—Oct. 1906:—

Two papers will be set in French and two in German, an hour and a half being allowed for the first paper, and two hours for the second; the first paper will contain a passage for translation from English into French or German, with some short sentences of an idiomatic character; the second paper will contain a set of grammatical questions, two passages for translation into English (one in verse, one in prose), and a selection of literary or philological questions, from which the candidate will be allowed to choose *one only*. A higher value is attached to the first paper in both French and German.

The authors prescribed for literary questions for 1906 will be as follows:—

FRENCH.—(17th century)—Pascal, Descartes, Corneille, Racine, Molière, Boileau, La Fontaine, Madame de Sévigné, Bossuet, Fénelon, La Rochefoucauld, La Bruyère.
GERMAN.—Klopstock, Wieland, Lessing, Herder, Bürger, Voss, Friedrich Leopold Stolberg, Hölfy, Leisewitz.

In the examinations to be held in 1907:—

Two papers will be set in French and two in German, two hours being allowed for each; the first paper to contain a passage for translation from English into French or German, and a test in free composition on some easy subject; the second paper will contain a few grammatical and easy philological questions, two unseen pieces for translation into English (one in prose, one in verse), and a selection of literary questions from which the candidate must choose one only. Candidates will be expected to satisfy the Examiners on the first paper in the language which he takes.

Literature will comprise a general knowledge of the life and works of four standard writers (for French literature, two at least from the 19th century, and one at least from the 17th century), with special reference to one particular work by each of them. Two of the authors will be changed from year to year.

The authors prescribed for literary questions (in 1907) will be as follows:—

FRENCH.—La Fontaine, *Fables*, Book VII.; Molière, *Le Bourgeois Gentilhomme*; Victor Hugo, *Hernani*; Taine, *Voyage aux Pyrénées*.

GERMAN.—Lessing, *Minna von Barnhelm*; Schiller, *Ballads*; Goethe, Extracts from *Dichtung und Wahrheit* (School Text); Freytag, *Soll und Haben* (School Text).

(6) Mathematics on the lower standard shall comprise—(a) Arithmetic, including Vulgar and Decimal Fractions, Proportion, Percentage, Square Root, Simple Interest; (b) Algebra, including Fractions, Factors, Square Root, Equations of the First Degree, Simultaneous Equations of the First Degree, Easy Quadratic Equations, Problems leading to the above Equations; (c) Geometry: Euclid, Books I., II., and III. (or their equivalents), with easy deductions. Demonstrations other than Euclid's will be accepted if they assume no propositions which in Euclid's order are subsequent to the proposition under consideration.

(7) Mathematics on the intermediate standard shall include the following, in addition to the subjects included in the lower standard, viz.:—(a) Euclid: Book VI., Propositions 1—19, or Geometry equivalent thereto. (b) Algebra: Quadratic Equations, Ratio and Proportion. (c) The Trigonometry of Right-angled Triangles.

(8) Mathematics on the higher standard shall, in addition to what is included on the lower standard, comprise Euclid, Books IV., VI., and the first twenty-one propositions of Book XI. (or their equivalents), with Deductions, Quadratic Equations, Trigonometry to the Solution of Triangles inclusive, and the use of Logarithmic Tables.

In the examination in Mathematics on the higher and intermediate and on the lower standards each question in Geometry will consist of two parts, of which one will be an easy deduction or illustrative exercise on the proposition set as bookwork.

The papers in Mathematics on the higher standard and on the intermediate standard will be devoted to the various subjects comprised in them as nearly as possible in the following proportions: two-fifths to Geometry, two-fifths to Algebra (including Arithmetic, if thought desirable), and one-fifth to Trigonometry.

Candidates for the higher standard may obtain full marks by doing correctly about two-thirds of the questions set in each subject; but the Examiners will be entitled to reject a candidate who makes in any subject less than a certain minimum of the marks allotted to that subject.

The pass-mark for candidates on the intermediate standard is fixed with reference to the total number of marks assigned to questions which fall under the syllabus of the intermediate standard; but such candidates will receive credit for any question they may answer.

The paper in Mathematics on the lower standard will be devoted to the various subjects comprised in as nearly as possible the following proportions: four-ninths to Geometry, three-ninths to Algebra, and two-ninths to Arithmetic.

Candidates may obtain full marks by doing correctly about two-thirds of the questions set in each subject; but the Examiners will be entitled to reject a candidate who makes in any subject less than a certain minimum of the marks allotted to that subject.

(9) Dynamics shall mean the Elementary Statics and Kinetics of Solids, Liquids, and Gases.

The paper on Dynamics will be directed to test the candidate's knowledge of the fundamental principles of the subjects included in it. Questions may be set which involve the Trigonometry of right-angled triangles.

Candidates may obtain full marks by doing correctly about two-thirds of the questions set in each section of the paper.

(10) A candidate shall be obliged to pass in all the required subjects at one or not more than two examinations; provided that he may offer himself *for re-examination* as often as may be necessary *to satisfy this condition*.¹

¹ The words in italics are taken from a supplementary Ordinance No. 44, which was approved by Her Majesty in Council on 28th May, 1894, and came into force on 1st October, 1894. The ordinance provides that the alterations on Sections III. (10) and IV. (1) shall be held to have come into force on 1st October, 1892.

IV. (1) Attendance on any class shall not qualify for graduation, unless the whole Preliminary Examination has been previously passed. *Any student who has passed in Latin, Greek, or Mathematics on the higher standard may attend a qualifying class in such subject or subjects without having passed in the other subjects of the examination, provided always that (a) no candidate shall be allowed to present himself for examination in any subject qualifying for graduation until he has passed the whole Preliminary Examination; and (b) no student shall be admitted to a degree in Arts unless he has attended qualifying classes in the University granting the degree, or in another Scottish University, as provided by Section xxv. hereof, for three academic years after he has completed his Preliminary Examination.*¹

(2) Attendance on a class in any language included in the Preliminary Examination shall not qualify for graduation, unless the candidate, before entering the class, has passed the Preliminary Examination in that subject, and on the higher standard where a double standard is provided. He may, for that purpose, attend any Preliminary Examination held during the course of his study, taking only the paper set in that subject; provided always that the provisions of the sub-section immediately preceding shall have been satisfied.

(3) Attendance on a class in any language not included in the Preliminary Examination shall not qualify for graduation, unless the candidate has previously passed an examination in that language on a standard as nearly as possible equivalent to the higher standard of the languages included in the Preliminary Examination.

(4) Attendance on a class of Mathematics or Natural Philosophy shall not qualify for graduation unless the candidate, before entering the class, has passed in Mathematics on the higher standard or on the intermediate standard.

V. (1) The Preliminary Examination shall be held at each University twice in each year, under such regulations as the Senatus, with the approval of the University Court, shall from time to time determine, and shall be conducted in writing.²

(2) The Joint-Board of Examiners to be appointed under the provisions of Ordinance No. 13 (Regulations as to Examinations) shall have power to accept the Higher Grade Leaving Certificate of the Scotch Education Department in any subject as an equivalent for the Preliminary Examination in that subject; and to accept the Lower Grade Leaving Certificate of the said Department as an equivalent for the Preliminary Examination on the lower standard in Latin, Greek, and Mathematics; provided they are satisfied that the standard of the examination, at which the said certificates were granted, is not lower than that required by this ordinance.

Under this sub-section the Joint Board of Examiners has resolved as follows:—For the Preliminary Examination in Arts and Science, Passes in the Higher and Honours Grade of the Leaving Certificate Examinations of the Scotch Education Department in Latin, Greek, and Mathematics will be accepted as equivalent to the higher standard in

¹ See footnote on p. 209.

² For dates of Preliminary Examinations see Table on page 211.

TABLE OF PRELIMINARY EXAMINATIONS FOR DEGREES IN ARTS, SCIENCE AND MEDICINE,
TO BE HELD DURING SESSION 1906-7.

I. ARTS AND SCIENCE.

Fee.	Names to be given in and Fees paid to Assistant-Clerk (Matriculation Office). Date.	Subject.	Dates of Examinations and Hours at which the various Papers will be set.
10s. 6d.	10th September or 8th March.	English (1st Paper), Higher Latin (1st Paper), - Lower Latin, - English (2nd Paper), Intermediate and Higher Math. (1st Paper), - Lower Greek, - Higher Latin (2nd Paper), - Intermediate and Higher Math. (2nd Paper), - Lower Mathematics Higher Greek (1st Paper), - French (1st Paper), Dynamics, - Higher Greek (2nd Paper), - French (2nd Paper), German (1st Paper), German (2nd Paper), Italian (1st Paper), Italian (2nd Paper), Celtic,	Friday, 28th September, 9 to 11 a.m. Friday, 28th September, 12 noon to 2 p.m. Friday, 28th September, 3 to 6 p.m. Saturday, 29th September, 9 to 11 a.m. Saturday, 29th September, 12 noon to 2 p.m. Saturday, 29th September, 3 to 6 p.m. Monday, 1st October, 9 to 11 a.m. Monday, 1st October, 12 noon to 2 p.m. Monday, 1st October, 3 to 6 p.m. Tuesday, 2nd October, 9 to 11 a.m. Tuesday, 2nd October, 12 noon to 1.30 p.m. Tuesday, 2nd October, 3 to 6 p.m. Wednesday, 3rd October, 9 to 11 a.m. Wednesday, 3rd October, 12 noon to 2 p.m. Wednesday, 3rd October, 3 to 4.30 p.m. Thursday, 4th October, 9 to 11 a.m. Thursday, 4th October, 12 noon to 1.30 p.m. Thursday, 4th October, 3 to 5 p.m. Friday, 5th Oct., 9 to 11 a.m. & 3 to 5 p.m.
10s. 6d.		English (1st Paper), Higher Latin (1st Paper), - Lower Latin, - English (2nd Paper), Intermediate and Higher Math. (1st Paper), - Lower Greek, - Higher Latin (2nd Paper), - Intermediate and Higher Math. (2nd Paper), - Lower Mathematics Higher Greek (1st Paper), - French (1st Paper), Dynamics, - Higher Greek (2nd Paper), - French (2nd Paper), German (1st Paper), German (2nd Paper), Italian (1st Paper), Italian (2nd Paper), Celtic,	Friday, 29th March, 9 to 11 a.m. Friday, 29th March, 12 noon to 2 p.m. Friday, 29th March, 3 to 6 p.m. Saturday, 30th March, 9 to 11 a.m. Saturday, 30th March, 12 noon to 2 p.m. Saturday, 30th March, 3 to 6 p.m. Monday, 1st April, 9 to 11 a.m. Monday, 1st April, 12 noon to 2 p.m. Monday, 1st April, 3 to 6 p.m. Tuesday, 2nd April, 9 to 11 a.m. Tuesday, 2nd April, 12 noon to 2 p.m. Tuesday, 2nd April, 3 to 6 p.m. Wednesday, 3rd April, 9 to 11 a.m. Wednesday, 3rd April, 12 noon to 2 p.m. Wednesday, 3rd April, 3 to 5 p.m. Thursday, 4th April, 9 to 11 a.m. Thursday, 4th April, 12 noon to 2 p.m. Thursday, 4th April, 3 to 5 p.m. Friday, 5th April, 9 to 11 a.m. & 3 to 5 p.m.

II. MEDICINE.

Fee.	Names to be given in and Fees paid to Assistant-Clerk (Matriculation Office). Date.	Subject.	Dates of Examinations and Hours at which the various Papers will be set.
10s. 6d.	10th September or 8th March.	English, - Latin, - Greek, - Mathematics, - French, - German, -	Friday, 28th September, 9 a.m. to 12 noon. Friday, 28th September, 3 to 6 p.m. Saturday, 29th September, 3 to 6 p.m. Monday, 1st October, 3 to 6 p.m. Tuesday, 2nd October, 12 noon to 3 p.m. Wednesday, 3rd October, 3 to 6 p.m.
10s. 6d.		English, - Latin, - Greek, - Mathematics, - French, - German, -	Friday, 29th March, 9 a.m. to 12 noon. Friday, 29th March, 3 to 6 p.m. Saturday, 30th March, 3 to 6 p.m. Monday, 1st April, 3 to 6 p.m. Tuesday, 2nd April, 12 noon to 3 p.m. Wednesday, 3rd April, 3 to 6 p.m.

1 For Women Students, Miss Galloway, Queen Margaret College.

each of these subjects, as prescribed by the Arts Ordinance, and Passes in the Lower Grade Certificate Examinations to the lower standard; Passes in the Higher and Honours Grade in English, in Modern Languages, and in Dynamics, will be accepted as equivalent to the standard prescribed for each of these subjects by the Arts Ordinance.

(3) The Joint-Board of Examiners shall have power to determine what examinations, if any, other than those for the Leaving Certificates of the Scotch Education Department, may be accepted as equivalent to the Preliminary Examination in whole or in part, provided they are satisfied that such other examinations are in fact equivalent thereto.¹

Under this sub-section the Joint-Board have agreed to accept the following Examinations as exempting from the Preliminary Examination in Arts and Science, either wholly or in part:—

(a) A Degree in Arts or in Science, not being an Honorary Degree, in any of the Universities of the United Kingdom, shall exempt from the Preliminary Examination in Arts or in Science, as the case may be.

(b) A Certificate of having passed in the Honours or First Division in English in the London University Matriculation Examination will be accepted as equivalent to English in the Arts and Science Preliminary Examination; and the Joint-Board also accepts, for the Preliminary Arts and Science Examination, (1) London University Matriculation Mathematics as equivalent to Lower Mathematics; (2) London University Matriculation Mechanics as equivalent to Dynamics; and (3) London University Intermediate Mathematics as equivalent to Intermediate and Higher Mathematics.

(c) Oxford and Cambridge Schools Examination Board. Exemption will be granted as follows:—

A Pass in *Latin or Greek* for the Lower Certificate or the 'Leaving Certificate' will be accepted for Lower Latin or Lower Greek.

A Pass in *Latin or Greek* for the Higher Certificate will be accepted for Higher Latin or Higher Greek.

A Pass in *French or German* for the Higher Certificate will be accepted for the Arts and Science Pass in these subjects respectively.

In *Mathematics*,

Elementary Mathematics of the 'Leaving Certificate.'	} Will be accepted for Lower Mathematics.
Elementary Mathematics of the Higher Certificate.	

Additional Mathematics for the 'Leaving Certificate,' if endorsed with Trigonometry.	} Will be accepted for Higher Mathematics.
Additional Mathematics for the higher Certificate.	

Of these two, the former if not endorsed with Trigonometry will be accepted for Lower Mathematics only.

Natural Philosophy (Mechanical Division) will be accepted for Dynamics.

¹ Applications for exemption on the ground of having passed examinations not included in the following list should be addressed to the Convener of the Board. As several Universities have to be consulted, a decision on a new case cannot be guaranteed in less time than from two to three weeks.

In *English*,
 The Higher Certificate with English.
 The Higher Certificate with Essay and History } Will be accepted for
 or Geography. } the Arts and Science
 The 'Leaving Certificate,' with English, History, } Pass in English.
 and Geography.

(d) Oxford University Local Examinations:—

(i.) Junior Local Examination:—Distinction in Mathematics (if the Candidate has passed both in Algebra and Geometry), with a Pass in Arithmetic, will exempt from Lower Mathematics.

A Pass in Higher Mathematics, if it includes Algebra and Geometry with a Pass in Arithmetic, will exempt from Lower Mathematics.

(ii.) Senior Local Examination:—A Pass in Latin will exempt from Lower Latin; a Pass in Greek will exempt from Lower Greek; Distinction in Latin will exempt from Higher Latin; Distinction in Greek will exempt from Higher Greek; Distinction in French or German will exempt from French or German respectively; a Pass in Mathematics, including Algebra and Geometry, with Arithmetic, will exempt from Lower Mathematics; a Pass in Higher Mathematics, including Algebra, Geometry, and Trigonometry, will exempt from Higher Mathematics; a Pass in English Language and Literature, History, and Geography (with Distinction in the first of the three) will exempt from English.

(iii.) Higher Local Examination:—This will be accepted *pro tanto*.

(e) Cambridge University Local Examinations:—

(i.) Junior Local Examination:—Distinction in Mathematics will exempt from Lower Mathematics, provided it includes a Pass in both Algebra and Geometry.

(ii.) Senior Local Examination:—A Pass in Latin will exempt from Lower Latin; A Pass in Greek will exempt from Lower Greek; Distinction in Latin will exempt from Higher Latin; Distinction in Greek will exempt from Higher Greek; Distinction in French or German will exempt from French or German respectively; a Pass in Algebra and Geometry will exempt from Lower Mathematics; a Pass in Mathematics, including a Pass in Algebra, Geometry, and Trigonometry, will exempt from Higher Mathematics; a Pass in English Language and Literature, History and Geography (with Distinction in the first of the three) will exempt from English.

(iii.) Higher Local Examination:—This will be accepted *pro tanto*.

(f) Universities of India (Calcutta, Madras, Bombay, Punjab, Allahabad):—

A Pass in the 'Intermediate' or 'First Arts' Examination will exempt from the Lower Standard in Latin, Greek, or Mathematics. Exemption on the Higher Standard will be granted in any subject in which the applicant can show by special certificate that he has obtained not less than 45 per cent. in the paper on that subject in the Intermediate Examination. Applicants who have obtained a 'First Class' or have been placed in the 'First Division' in that examination will receive full exemption from the Preliminary in Arts or Science (provided that the

subjects taken include those required by the Ordinances of the Scottish Universities Commissioners, and subject to the provisions of Ord. No. 11. Section IV. subsections 2, 3, and 4 (page 210).

(g) Continental Countries.—Abiturienten-Examen giving admission to German Universities, and corresponding Examinations in other Countries.

By *pro tanto* is here meant that a certificate of having passed in the Examination referred to, in any subject required for the Arts and Science Preliminary Examination, shall, as regards that subject, exempt from further examination in the said Preliminary Examination, provided that all the required subjects shall be passed at one or not more than two examinations.

ORDINARY DEGREE.

VI. Candidates for the ordinary degree of Master of Arts may follow the Curriculum and take their degree in the subjects hitherto recognized for graduation, as provided by the regulations¹ contained in Ordinances Nos. 12, 14, 18, and 69 of the Commissioners under the Universities (Scotland) Act, 1858, subject always to the preceding provisions of this ordinance; or they may vary the Curriculum for graduation under the regulations contained in the immediately succeeding sections.

VII. (1) Candidates shall attend full courses in at least seven subjects, and shall be examined on these subjects.

(2) Of these subjects four must be (a) Latin or Greek (not Modern Greek); (b) English or a Modern Language (*i.e.* French, German, Italian, or Spanish) or History; (c) Logic and Metaphysics, or Moral Philosophy; (d) Mathematics or Natural Philosophy.

(3) The remaining subjects may be selected by the candidate from the departments specified in Section IX. of this ordinance, under the following condition:—That the whole subjects taken shall include either (a) both Latin and Greek (not Modern Greek), or (b) both Logic and Moral Philosophy, or (c) any two of the following three subjects:—Mathematics, Natural Philosophy, and Chemistry.

VIII. (1) Each of the subjects must be studied in a full course of not less than one hundred meetings of the class on separate days, except in cases where the Senatus, with the approval of the University Court, shall have sanctioned, as qualifying for graduation, half courses of not less than fifty meetings on separate days; or where the Senatus, with the approval of the said Court, shall, having regard to the nature of the subject, sanction full courses of less than one hundred or of less than fifty meetings respectively.

Under this sub-section the Senate, with the approval of the University Court, has sanctioned, as qualifying for graduation, half courses in the following subjects, viz.:—Latin, Greek, Hebrew, Arabic, Mathematics, and Astronomy.

¹ These regulations are printed on pp. 173, 174 of the *Calendar* for 1900-1901.

(2) Two half courses shall be held to be equivalent to a full course in such cases as the Senatus, with the approval of the University Court, may determine, and under such regulations as may from time to time be made for that purpose.

Under this sub-section the Senate, with the approval of the University Court, has determined that a half course in any subject may not be combined with a half course in another subject, but only with a second half course in the same subject.

(3) Where a subject is taught in a practical class, as well as in a systematic class, the Senatus, with the approval of the University Court, shall regulate the course of study and determine the relative proportion of lectures and laboratory or practical work.

Under this sub-section the Senate, with the approval of the University Court, has resolved that in Chemistry, Zoology, Botany, and Geology, the course of study for a Degree in Arts, and the relative proportion of lectures and laboratory or practical work, shall be as follows:—

1. Chemistry.—A systematic course of one hundred meetings of the class and a practical course of two and a half months.

2. Zoology.—One hundred meetings on separate days, viz., fifty in systematic course and fifty in practical course.

3. Botany.—One hundred meetings on separate days, viz., fifty in systematic course and fifty in practical course.

4. Geology.—One hundred meetings on separate days.

IX. The departments of study for graduation in Arts in each University shall, if adequate instruction is provided, include the following subjects, with such additions or modifications in any University as may hereafter be made by ordinance of the University Court:—

1. *Language and Literature.*

Latin.	French.	Sanskrit.	Celtic.
Greek.	German.	Hebrew.	Modern Greek.
English.	Italian.	Arabic or Syriac.	

2. *Mental Philosophy.*

Logic and Metaphysics.	Education (Theory, History, and
Moral Philosophy.	Art of).
Political Economy.	Philosophy of Law.

3. *Science.*

Mathematics.	Astronomy.	Zoology.	Geology.
Natural Philosophy.	Chemistry.	Botany.	

4. *History and Law.*

History.	Roman Law.
Archæology and Art (History of).	Public Law.
Constitutional Law and History.	

X. Candidates who produce certificates that they have satisfied all the conditions prescribed by this Ordinance, and who have passed the necessary examinations, shall be entitled to receive the ordinary degree of Master of Arts on payment of the fees required.

DEGREE WITH HONOURS.

XI. (1) The degree of Master of Arts may be taken with Honours in any of the following Groups, in which Honours Classes shall have been established in at least two subjects:—

- (a) Classics (*i.e.* Latin and Greek, with optional subjects such as Comparative Philology, Ancient Philosophy, and Classical Archæology).
- (b) Mental Philosophy.
- (c) Mathematics and Natural Philosophy.
- (d) Semitic Languages.
- (e) Indian Languages.
- (f) English (Language, Literature, and British History).¹
- (g) Modern Languages and Literature (*i.e.*, French, German, Italian, or Spanish).
- (h) History.
- (i) Economic Science [*i.e.*, Political Economy with either (a) Moral Philosophy or (b) History as supplementary Honours Subjects].²

(2) Every Candidate shall take up at least five subjects. Two of these subjects, under separate Professors or Lecturers, must be selected from the Candidate's Honours Group; and the five subjects shall include one from each of the Departments of Language and Literature, Mental Philosophy, and Science, set forth in Section IX. of this Ordinance.

(3) Every Candidate shall attend seven Classes, taking two Classes (one of which shall be an Honours Class) in each of his Honours subjects.³

(4) A Candidate who has obtained Honours in any one Group, may, before graduating,⁴ present himself again for examination in a second Honours Group. In such a case, he shall not be required to attend more than two additional Classes, which shall be Honours Classes in the second Group.

(5) The examination in the subjects comprised in the Candidate's Honours Group shall be of a higher standard than that required for the ordinary degree of Master of Arts. In his other subjects the standard shall be that required for the ordinary degree.

¹ The Senatus Academicus, in determining the courses to be attended within the Honours Group entitled "English (Language, Literature, and British History)," and the character of the examination specified in Section XI., sub-section 1 (*f*), shall regard English Literature as constituting the chief subject of the Group, the linguistic and historical subjects being regarded as subsidiary thereto.

² This Group of Honours was instituted by Ordinance No. 160, issued by the Universities Commission on 10th May, 1897, and approved by Her Majesty in Council on 19th May, 1898.

³ The Senate, on 6th April, 1899, made the following regulation:—No Honours Class can be taken for graduation purposes either before or in the same session as an Ordinary Class in the same subject.

⁴ Ordinance No. 168, which was issued by the Universities Commission on 24th June, 1897, and approved by Her Majesty in Council on 19th May, 1898, enacts that, notwithstanding the provisions of this sub-section, a candidate who has already graduated may present himself for examination in any Honours Group within five years from the date of his first matriculation after having passed the Preliminary Examination. If he be successful in obtaining Honours, he shall receive a special certificate stating the Honours Group in which he has presented himself, and the class he has obtained in the Group.

(6) The Senatus shall, subject to the provisions of Sections XVI. to XX. of this Ordinance, from time to time determine what subjects shall be comprised in each Group, what subjects may be taken in half courses, and in which Group they may be taken: Provided that no new Group shall be instituted except by Ordinance of the University Court.

(7) The provisions of Section VIII. of this Ordinance shall apply to Candidates for Honours; but, in their case, not fewer than fifty meetings, on separate days, extending over an entire winter session, shall constitute a full course for an Honours Class; and not fewer than twenty-five meetings on separate days, extending over half a winter session, or an entire summer session, shall constitute a half course.

XII. (1) Every Candidate shall include Latin, or Greek, either in his Honours Group or as one of the subjects in which the standard of examination is that required for the ordinary degree of Master of Arts.

(2) Greek shall be compulsory for candidates for Honours in Mental Philosophy. *Candidates for Honours in Mental Philosophy who have included Latin, but not Greek, as one of the subjects in which the standard of examination is the same as that required for the ordinary degree of Master of Arts, shall be deemed to have satisfied the provisions of this sub-section, if, before they offer themselves for the Honours examination in Mental Philosophy, they shall have passed a special examination in translating into English, passages from the works of Greek philosophical authors,*¹ *including passages from the works of such authors not previously prescribed.*²

(3) Candidates for Honours in English, or Modern Languages and Literature, or History, or *Economic Science*³ (Groups *f, g, h, i,* of Section XI. hereof), shall include within the whole subjects taken for their degree (*a*) Logic and Metaphysics or Moral Philosophy and (*b*) Mathematics or Natural Philosophy.

(4) Every candidate shall have obtained a certificate for his attendance on the class of Latin or Greek, under sub-section (1) or (2) of this section before he offers himself for examination in his Honours group of subjects.⁴

(5) Candidates for Honours in Economic Science (Group *i*) of Section XI. hereof), who take Moral Philosophy as their supplementary Honours subject, may take a half course in the History of Civil Law and a half course in the Philosophy of Law, which, together, shall be deemed to constitute one of the subjects in which the standard of examination is that required for the ordinary degree of Master of Arts.⁵

XIII. (1) The whole examination in the candidate's Honours Group must be taken at one time, and the whole examination necessary for graduation with Honours must be taken within five years from the date of the candidate's first matriculation after having passed the Preliminary Examination, unless that period shall be extended by the Senatus on

¹ The following works have been prescribed, viz. (*a*), Plato's *Phaedo* or any book of the *Republic*; (*b*) Aristotle's *Ethics*, Book I.

² The words in *italics* in this sub-section are taken from Ordinance No. 148.

³ The words in *italics* are taken from Ordinance No. 160.

⁴ This sub-section is taken from Ordinance No. 148.

⁵ This sub-section is taken from Ordinance No. 160. See second note on p. 216.

special cause shown; and in every such case the Senatus shall make a report to the University Court setting forth the reasons for the extension.

(2) Candidates for Honours may be examined, at any time during their Curriculum, in the three subjects in which the standard of examination is that required for the ordinary degree of Master of Arts.

XIV. (1) A candidate who has passed the examinations necessary for the ordinary degree of Master of Arts, but who has not yet graduated,¹ may present himself for Honours within five years from the date of his first matriculation after having passed the Preliminary Examination, and shall not be required to attend further classes:—subject always to the provisions of Section XII. hereof.

(2) No one shall be allowed to present himself a second time as a candidate for the degree of Master of Arts with Honours, who, upon examination, has failed to obtain Honours.

(3) A candidate shall be held to have presented himself who has notified his name for Examination in accordance with the University regulations. But it shall be in the power of the Senatus to relax this rule on special cause shown; and in every such case the Senatus shall make a report to the University Court setting forth the reasons for the relaxation.

XV. (1) In each group there shall be three Grades of Honours, to be denominated respectively the First, Second, and Third Class. The names of the candidates entitled to Honours in each class shall be arranged in alphabetical order.

(2) For the degree of Master of Arts with Honours a Diploma shall be given setting forth the subjects in which he has taken Honours.

BOARDS OF STUDIES.

XVI. The Senatus of each University shall from time to time institute Boards of Studies corresponding as nearly as may be to the Departments of Study enumerated in Section IX. of this Ordinance.

XVII. Each Board of Studies shall consist of such Members of the Senatus and Lecturers in the University as the Senatus may from time to time select, and the Senatus shall appoint one of the Members of the Board to be Convener thereof.

XVIII. Before the end of each winter session each Professor and Lecturer in the said Departments of Study shall submit to the proper Board of Studies for its approval a syllabus of the subjects and books proposed for the work of his class for the next academical year. As soon as such approval has been given, the syllabus shall be transmitted to the Faculty of Arts for its consideration. The syllabus, with such

¹ Ordinance No. 168, which was issued by the Universities Commission on 24th June, 1897, and approved by Her Majesty in Council on 19th May, 1898, enacts that, notwithstanding the provisions of this sub-section, a candidate who has already graduated may present himself for examination in any Honours Group within five years from the date of his first matriculation after having passed the Preliminary Examination. If he be successful in obtaining Honours, he shall receive a special certificate stating the Honours Group in which he has presented himself, and the class he has obtained in the Group.

observations as the Faculty of Arts may see fit to make thereon, shall then be transmitted to the Senatus for its sanction.

In addition to the syllabus of subjects specified in Section XVIII., the Professors, and in the case where a subject is taught by a Lecturer only, the Lecturer or Lecturers, shall submit to the proper Board of Studies a syllabus of the subjects and books to be prescribed for the examinations for the Ordinary Degree of Master of Arts in the next academical year, and for the Honours examinations in the academical year next but one.

XIX. (1) Before the end of each winter session each Board of Studies shall prepare a scheme defining for the academical year next but one following, the classes which shall be deemed to be Honours Classes, and the subjects and courses of reading for Honours in its department, and shall report the same to the Faculty of Arts for its consideration. The scheme, with such observations as the Faculty of Arts may see fit to make thereon, shall then be transmitted to the Senatus for its sanction.

(2) Each Board shall in like manner make recommendations through the Faculty of Arts to the Senatus in regard to the half courses which may be sanctioned under the provisions of this ordinance, and the Lectures which may be given on special subjects.

XX. The Principal and the Dean of the Faculty of Arts shall be *ex-officio* Members of each Board of Studies. The Convener shall preside, and, in his absence, each meeting shall appoint its own Chairman, and every Chairman shall have a deliberative, and, in cases of equality, a casting vote.

GENERAL.

XXI. In the case of a foreign student whose native language is other than English, the standard required in English in the Preliminary Examination shall be such as the Joint Board of Examiners may deem sufficient. In the case of a student whose native language is other than European, the Senatus may accept as an alternative to Latin or Greek any other classical language, such as Sanskrit or Arabic, subject always to the provisions of Section IV., Sub-section 3 hereof.

XXII. If a student, before passing the Preliminary Examination, has attended a class qualifying for graduation, the Senatus may, on special cause shown, permit him to count such class as qualifying for graduation, on condition of his passing the full Preliminary Examination within such time thereafter as the Senatus may appoint; and in every such case the Senatus shall make a report to the University Court setting forth the reasons for the relaxation.

XXIII. The examination in all the languages in the Curriculum shall, as far as possible, be on the same standard in examinations for the same degree, and shall in all cases test the candidate's knowledge of the history and literature of the several countries.

XXIV. A candidate for the degree of Master of Arts shall not be deemed to have attended a class as part of the Curriculum for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

XXV. A student, who has given attendance at classes recognized as qualifying for graduation during one or more sessions in any one or more of the Scottish Universities, may complete his Curriculum by giving attendance during the remainder of his course in another Scottish University, and may proceed to a degree in the latter University in the same way, in all respects, as if the previous part of his Curriculum had been taken therein: Provided always that every such student shall be bound to produce, to the satisfaction of the Senatus of the latter University, certificates of his having passed the Preliminary Examination, and of his attendance at the former University or Universities, and shall be examined in all the subjects necessary for a degree of Master of Arts by the Examiners of the University in which he completes his Curriculum, and in which alone he shall be allowed to graduate; and that no such student shall be admitted to a degree in any University unless he has given attendance in such University during the last winter session of his Curriculum, and one other winter session or two summer sessions.

XXVI. A candidate for the degree of Master of Arts with Honours, who has failed to be placed in any class, may, provided that in the opinion of the Examiners he has given evidence of sufficient attainments in any subject for the ordinary degree of Master of Arts, receive from them a certificate of having passed in such subject, which shall count *pro tanto* as part of the examination required under the regulations for the ordinary degree of Master of Arts.

XXVII. The degree of Master of Arts shall in no case be conferred on persons who have not satisfied the conditions hereinbefore set forth, and shall not be conferred *honoris causa tantum*.

XXVIII. A student who, previous to 1st October, 1892, commenced his course of study with a view to graduation in Arts in any of the Scottish Universities under the regulations¹ in force at the time in such University, may complete his course and become a candidate for the degree of Master of Arts, with or without Honours, in conformity with such regulations. And any such student who has passed the examination hitherto required for admission to a Curriculum of three sessions shall, if he desire to come under the regulations of this Ordinance, be exempted from the Preliminary Examination herein required.

XXIX. Students may attend any classes without having passed the Preliminary Examination within the meaning of this Ordinance, but such attendance shall not qualify for graduation.

Attendance on classes in the Faculty of Arts in which the teaching is on the standard at present recognised for the classes hitherto known as Junior or Middle Classes, shall in no case qualify for graduation.

XXX. It shall be competent for the University Court in each University to discontinue the Junior Classes, or Middle Classes, where such exist, in Latin, Greek, and Mathematics, when, in the opinion of the Court, the provision for Secondary Education in schools throughout the country is sufficient to render such classes no longer necessary.

¹ These regulations may be found at pp. 173, 174 of the *University Calendar* for 1900-1901, and in the *Calendars* for preceding sessions.

TABLE OF SUBJECTS OF EXAMINATION FOR THE DEGREE OF MASTER OF ARTS, ACCORDING TO THE DIFFERENT CLASSES OF DISTINCTION WHICH CANDIDATES MAY HAVE IN VIEW.

The Examination Questions set in April, 1906, in the several Departments and Subjects will be found towards the end of the *Contender*.

IN	FOR ORDINARY DEGREE.	FOR HONOURS.
	<p>October, 1906.</p> <p>VIRGIL, <i>Æneid</i>, Book V. HORACE, <i>Odes</i>, I-IV. HORACE, <i>Satires</i>, Book II. TACITUS, <i>Annals</i>, XIV. CICERO, <i>Pro Milone</i> and <i>Pro Archia</i>. ROMAN ANTIQUITIES (Ramsay, Caps. II to VIII inclusive, and Cap. XI). ROMAN HISTORY from B.C. 390 to B.C. 146 (How and Leigh's <i>History of Rome</i>). Unseen translation. <i>Note</i>.—Proficiency in Latin Prose Composition and in Grammar is indispensable. A knowledge of the matter of the books read is required, so as to enable a student to explain and comment on the text, and explain allusions.</p>	<p>October, 1906, and afterwards till further notice.</p> <p>{ VIRGIL, <i>Georgics</i>, I-III, and <i>Æneid</i>, III-VI. HORACE, the <i>Satires</i> and <i>Epistles</i> with <i>Arts Poetica</i>. And any two (or more) of the following combinations : (a) LUCRETIVS, Books I, II (or III and IV to line 1019), with a play of PLAUTUS. (b) JUVENAL (the whole excepting <i>Sat.</i> II, VI, and IX). (c) PERSIUS, with Sellar's Selections from Martial, Books V-VIII. (d) CATULLUS (Clarendon Press Selection) and PROPERTIUS (Ramsay's Selection).</p>
LATIN	<p>April and October, 1907.</p> <p>HORACE, <i>Odes</i>, I, II, III, IV. HORACE, <i>Satires</i>, II. VIRGIL, <i>Æneid</i>, VII. CICERO, <i>Pro Cluentio</i>. TACITUS, <i>Annals</i>, XV. ROMAN ANTIQUITIES (Ramsay, Caps. II to VIII inclusive, and Cap. XI). ROMAN HISTORY, from B.C. 753 to B.C. 241 (How & Leigh's <i>History of Rome</i>). Unseen translation. <i>Note</i>.—Proficiency in Latin Prose Composition and in Grammar is indispensable. A knowledge of the matter of the books read is required, so as to enable a student to explain and comment on the text, and explain allusions.</p>	<p>{ CICERO, the <i>Philippic Orations</i>, I-VI, or Tyrell's <i>Cicero in his Letters</i> (Macmillan) the whole. LIVY, I-III, or XXI-XXIII. TACITUS, <i>Annals</i>, XI-XIV.</p> <p>With Latin Composition, History, and Antiquities, etc. Passages also from Books not prescribed will be set. A passage for translation into Latin Elegiac verse (voluntary) will be set.</p>

IN	FOR ORDINARY DEGREE.	FOR HONOURS.
GREEK	<p>October, 1906.</p> <p>POETAE BUCCOLICI (viz. THEOCRITUS, I, II, III, VI, VII, X, XI, XIV, XV, XXI, XXVIII; LEONIDAS TARENTINUS (Geffcken's text) as printed by MacLehose for the class; MOSCHUS, <i>Europa</i>; ANON. <i>Epitaph. Bionis.</i>) or</p> <p>HOMER, <i>Odyssey</i>, X.</p> <p>ARISTOPHANES, <i>Acharnians</i>.</p> <p>ANACREON, <i>de Myrtis</i>.</p> <p>ARISTOTLE, <i>Ethics</i>, IV.</p> <p>Bury's <i>History of Greece</i>.</p> <p>Unseen Translation and Prose Composition, Grammar, Literature, Antiquities, etc.</p>	<p>April, 1899, and afterwards till further notice.</p> <p>HOMER, <i>Iliad</i>, I, VI, IX, XVI, XXII; and <i>Odyssey</i>, VI, X, XI, XIV, XXIII.</p> <p>DRAMA. AESCHYLUS, <i>Agamemnon</i>, and SOPHOCLES, <i>Antigone</i>.</p> <p>HISTORY. EITHER THUCYDIDES, I, or HERODOTUS, VII.</p> <p>PHILOSOPHY. PLATO, either <i>Phaedo</i> or <i>Republic</i>, II, IV, and V, to page 466, omitting pages 458—461 (=Chap. I—XIII, omitting VIII and IX). ARISTOTLE, either <i>Poetics</i>, omitting Chap. XX and XXI, or <i>Politics</i>, I—II, 6 inclusive.</p> <p>TWO ADDITIONAL BOOKS I to be chosen by the Candidate subject to the special approval of the Professor, which must be applied for at least Three Months before the Examination. By a Book is meant an amount of continuous Prose equal to a Book of Herodotus or Thucydides, or an amount of continuous Poetry equal to two plays.</p> <p>Besides passages for translation from the above books, Questions will be set upon the Text, Interpretation, and Subject Matter. A pure and accurate English style in translation is considered of the highest importance.</p> <p>Composition and Unseen Translation.</p> <p>A general knowledge of History, Antiquities, Literature, and Grammar is also required.</p>
	<p>April and October, 1907.</p> <p>HOMER, <i>Iliad</i>, XXII.</p> <p>EURIPIDES, <i>Andromache</i>.</p> <p>DEMOSTHENES, <i>de Falsa Legatione</i>.</p> <p>AESCHINES, <i>de Falsa Legatione</i>.</p> <p>Bury's <i>History of Greece</i>.</p> <p>Unseen Translation and Prose Composition, Greek Grammar, Literature, and Antiquities.</p>	<p>¹ Candidates are required to bring with them to the examination clean texts of the Additional Books which they profess. The paper will contain only a reference, and not the passage printed in full.</p>

IN	FOR ORDINARY DEGREE.	FOR HONOURS.
<p>ENGLISH LITERATURE</p>	<p>October, 1906. For students of 1905-6 :—See Syllabus in Calendar, 1905-6.</p>	<p>The subjects of examination in English¹ (Language, Literature, and British History) will be as follows :—</p> <p>I. LANGUAGE.—Anglo-Saxon and Middle-English, with Sweet's <i>Anglo-Saxon Reader</i> and Morris and Skeat's <i>Specimens of Early English</i>, Parts I and 2.</p> <p>II. LITERATURE.—(1) General History of English Literature. Two papers will be set, of which the first will deal more particularly with Chaucer, Spenser, and the rise of the Drama. (2) One verse and one prose author to be selected by the candidate and approved by the Professor. (3) Shakespeare. (4) A Dissertation on some subject approved by the Professor; the dissertation to be sent in to the Clerk of Senate not less than a month before the first day of the examination at which the candidate presents himself.</p>
	<p>April and October, 1907. The subjects prescribed for study in the class. See p. 73. Students are advised to present themselves at the April or the October examination immediately following their Course, as the subjects studied in the class will be changed from year to year.</p>	<p>III. HISTORY.—British History from 1485 to 1603, with special reference to the following books :—More's <i>Utopia</i>; Knox's <i>History of the Reformation</i>, Books I. and II.; <i>Voyages of Elizabethan Seamen</i> (Selections by E. J. Payne, vol. I.); or "The Renaissance and Reformation in English History," dealing with these movements, more especially in the 14th and 16th centuries. The books prescribed are :—Langland's <i>Vision of Piers Plowman</i> (first seven passages); More's <i>Utopia</i>; Latimer's <i>Sermons before Edward VI.</i>; Hooker's <i>Ecclesiastical Polity</i> (Books I-IV).</p>

¹ See p. 216, and first note at foot of page.

IN	FOR ORDINARY DEGREE.	FOR HONOURS.
FRENCH	<p>October, 1906.</p> <p>I. Translations into and from French.</p> <p>II. Questions on historical French grammar. Text-book : Darmesteter, <i>Grammaire historique de la Langue française</i>.</p> <p>III. Essay in French on (a) the general history of French Literature in the 19th century. (b) Molière, (c) Victor Hugo, and George Sand. Books prescribed: Molière, <i>Les Précieuses Ridées</i>; Hugo, <i>Le Tartuffe</i>, <i>Le Bourgeois gentilhomme</i>; Victor Hugo, <i>Extraits de L'annuaire</i> (Voesie); George Sand, <i>Les Maîtres sonneurs</i>.</p> <p>IV. Oral Examination. (1) Reading, translation, and explanation of a text studied in the class (see syllabus for work of class). (2) Conversation in French on the subjects of the Class Lectures.</p>	<p>October, 1906, and afterwards till further notice.</p> <p>I. Translations from Old French and from English into Modern French. Translations into English. Essay in English on Historical French Grammar. Text-book : A. Darmesteter, <i>Grammaire historique de la Langue française</i>. [Brimot, <i>Histoire de la Langue française</i>, is also prescribed as a text-book for April, 1907, and thereafter.]</p> <p>III. and IV. Essays in French on French Literature (a) General History, (b) Special Study of one of the following periods: (1) The Middle Ages, (2) The 16th and 17th centuries, (3) The 18th and 19th centuries.</p> <p>V. Oral Examination—(a) Reading, Translation, and Explanation of a text selected from one of the following books :—Gaston Paris, <i>Chanson de Roland</i>, <i>Chrétien de Troyes</i>; Jeanroy, <i>Montaigne's Essais</i>; Pellissier, <i>Extraits des poètes français du XVI^e siècle</i>; (b) A question to be answered on a particular subject of the special period selected by the candidate, the subject being approved by the Lecturer at least a month before the Examination takes place; (c) French History in the 19th century.</p>
	<p>April and October, 1907.</p> <p>I. Translations into and from French.</p> <p>II. Questions on historical French grammar. Text-book : Darmesteter, <i>Grammaire historique de la Langue française</i>.</p> <p>III. Essay in French on (a) the general history of French Literature in the 18th and 19th century; (b) La Fontaine, Victor Hugo, and Michelet. Books prescribed: La Fontaine, <i>Fables</i>; Victor Hugo, <i>Extraits de Poesies</i> (Edn. Delagrave); Michelet, <i>Notre France</i>.</p> <p>IV. Oral Examination. (1) Reading, translation, and explanation of a text studied in the class (see syllabus for work of class). (2) Conversation in French on the subjects of the Class Lectures.</p>	

IN	FOR ORDINARY DEGREE.	FOR HONOURS.
GERMAN	<p>October, 1906.</p> <p>(1) Translation from and into German. (2) The Grammar Lectures. (3) General Outline of German Literature. (4) Schiller, <i>Wilhelm Tell</i>; Wallenstein, <i>Lager und Piccolomini</i>; Lessing, <i>Nathan der Weise</i>; Fuld, <i>Die wilde Jagd</i>; Freytag, <i>Der Staut Friedrich's des Grossen</i>. (5) Oral Examination.</p> <p>April and October, 1907.</p> <p>(1) Translation from and into German. (2) The Grammar Lectures, and Brandt's Grammar. (3) General Outline of German Literature: special period, 1718-1805. (4) Goethe, <i>Tasso, Dichtung und Wahrheit</i> (Books I.-IV.); Lessing, <i>Maria von Barmheln</i>; Schiller, <i>Marie Stuart</i>; Kohlrausch, <i>Das Jahr, 1815</i>. (5) Oral examination.*</p>	<p>October, 1906.</p> <p>I. Translation from English and Middle High German into Modern German; Historical German Grammar.</p> <p>II. Middle High German (a) either <i>Der arme Heinrich</i>, or <i>Iwein</i>; (b) <i>Walther von der Vogelweide</i>, or <i>Das Nibelungenlied</i>, or Gothic, or Old High German.</p> <p>III. General History of German Literature to the year 1832, with special knowledge of the Classical period.</p> <p>IV. Oral Examination.</p> <p>Books prescribed: Wright, <i>Middle High German Primer</i>; Paul, <i>Mittelhochdeutsche Grammatik</i>; Pfeiffer, <i>Iwein</i>, <i>Das Nibelungenlied</i>, <i>Walther von der Vogelweide</i>; Kluge, <i>Geschichte der deutschen National-Literatur</i>; Scherer, <i>History of German Literature</i>; Wright, <i>Gothic Grammar and Old High German Grammar</i>; Behagel, <i>Historical Grammar of the German Language</i>.</p>
		<p>April and October, 1907.</p> <p>I. Translation from English and Middle High German into Modern German; Historical German Grammar; Faust. Part I.</p> <p>II. Middle High German (a) either <i>Iwein</i> (Books I.-IV.), or <i>Der arme Heinrich</i>; (b) <i>Das Nibelungenlied</i> (I.-IV.), or <i>Walther von der Vogelweide</i>, or Old High German, or Gothic. After 1907, <i>Das Nibelungenlied</i> (I.-X.).</p> <p>III. General History of German Literature to the year 1832, with a special knowledge of the Classical periods: Carlyle's Essays on Schiller, Goethe, and the <i>Nibelungenlied</i>.</p> <p>IV. Oral Examination.</p> <p>Books prescribed: Wright, <i>Middle High German Primer</i>; Paul, <i>Mittelhochdeutsche Grammatik</i>; "Deutsche Classiker des Mittelalters," <i>Der arme Heinrich</i>, <i>Iwein</i>, <i>Das Nibelungenlied</i>, <i>Walther von der Vogelweide</i>, published by Brockhaus, Leipzig; Kluge, <i>Geschichte der deutschen National-Literatur</i>; Scherer, <i>History of German Literature</i>; Behagel, <i>History of the German Language</i>; Faust (Part I.), Calvin Thomas; Sahr, <i>Sachs und Fischart</i>.</p>

IN	FOR ORDINARY DEGREE.	FOR HONOURS.
HEBREW	<p>October, 1906.</p> <p>The First Book of Samuel. Psalms CXX.—CXXXIV. Isaiah XXI.—XXXIX. The History of Israel, from the schism of the kingdom to the downfall of Jerusalem. Hebrew Archaeology: History of the Masoretic Text (Weir's <i>Short History</i>). Introduction to the Books prescribed. Unseen translation; unpunctuated text to be pointed and translated; translation from English into Hebrew; and Grammar, Syntax, and Accents.</p> <p>April and October, 1907.</p> <p>The Second Book of Samuel. Psalms I.—XLI. Job I.—XIV. The History of Israel, from the foundation of the monarchy to the downfall of Jerusalem. Hebrew Archaeology; History of the Masoretic Text (Weir's <i>Short History</i>). Introduction to the books prescribed. Unseen translation; unpunctuated text to be pointed and translated; translation from English into Hebrew; and Grammar, Syntax, and Accents.</p>	<p>The two Books of Samuel. The Book of Job. Petersmann's Selections from the Targums. The treatise <i>Aboda Zarra</i>. Brody and Albrecht's <i>New Hebrew School of Poets</i>, numbers 32-39 and 74-87 inclusive. History and Antiquities of Israel to the fall of the Jewish State. Outline History of Jewish Literature to the close of the Talmud. Composition and unseen Translation. Comparative Grammar of the Semitic Languages.</p>
ARABIC	<p>Qorān. The Suras contained in Nallino's <i>Chrestomathia Korani Arabica</i>. The Prose Extracts contained in Brünnow's <i>Chrestomathie aus Arabischen Prosaeritzstücken</i>. Nöldeke's <i>Selectus Veteran Carminum Arabicorum</i>, pp. 53-63, and 110-114. History and Literature:—Sale's Preliminary Dissertation on the Koran. History of the Arabs and their literature to the death of the Caliph Othman. Unseen translation; unpunctuated text to be pointed; translation from English into Arabic; Grammar, Syntax, and Prosody.</p>	<p>Qorān: Nallino's <i>Chrestomathia</i>; Al Fakhri (Derenbourg's Edition), pp. 101-158; Haṣiri, Maqāmāt, VII., IX., XIII., XXV., XXXIII., and XXXVIII.; Mujaṣṣit 'Adab, Vol. VI., pp. 184-209, 264-270, 286-312. History of the Caliphate to the fall of Bagdad.</p>

IN	FOR ORDINARY DEGREE.	FOR HONOURS.
<p>CELTIC</p>	<p><i>Old Gaelic. Seolac Conculaind</i> (in Windisch's <i>Irische Texte</i>); <i>Liadain and Corithir</i> (ed. Kuno Meyer). Grammatical and Literary Questions. Alexander Macdonald of Ardmurchlan's <i>Gaelic Poems</i>; <i>Leigheas Cos' O'Cein</i> (ed. Henderson). Translations from English into Modern Gaelic, and from Gaelic authors not prescribed. <i>History and Literature</i>. The McCallum Lectures by Professor Magnus Maclean. More minute study of the literary bearings of the works prescribed.</p>	
<p>LOGIC</p>	<p>The Class Lectures. Berkeley's <i>Principles of Human Knowledge</i> (in Fraser's <i>Selections from Berkeley</i>).</p>	<p>October, 1906, and until further notice. (a) Logic and Psychology: the subjects of the Class Lectures, Ordinary and Advanced. Candidates will be expected to have read some of the larger modern treatises on Logic, such as Mill, Venn, Sigwart, or Bosanquet, and a treatise on Psychology such as Stout's <i>Analytic Psychology</i> or James's <i>Principles of Psychology</i>. (b) Metaphysics: (1) Kant's <i>Kritik of Pure Reason</i>. (2) Two of the following subjects, one to be a subject in Greek Philosophy and one in Modern Philosophy:—(i.) History of Greek Philosophy up to Aristotle; (ii.) Aristotle and the Post-Aristotelian systems (exclusive of Neo-Platonism); (iii.) Descartes and Cartesianism, Spinoza and Leibniz; (iv.) Locke, Berkeley and Hume; (v.) Hegel's smaller <i>Logic</i> (Wallace's translation).</p>

IN	FOR ORDINARY DEGREE.	FOR HONOURS.
<p>MORAL PHILOSOPHY</p>	<p>The Professor's Lectures during the session in which the student examined has attended the Moral Philosophy Class; the <i>Republic</i> of Plato (translated by Davies and Vaughan), and Janet and Scailes, <i>History of the Problems of Philosophy</i>, vol. II., part II.</p>	<p>Candidates for Honours will be examined in :—(1) The Professor's Lectures; (2) Aristotle's <i>Ethics</i> (omitting Books VII and VIII), Aristotle's <i>Politics</i>, Books I—IV, and, in connection therewith, the History of Ethical Thought in Greece previous to Aristotle; (3) Spinoza's <i>Ethics</i>; (4) The Ethical Theory of Kant, together with Caird's <i>Philosophy of Kant</i>, Books II, III, IV, and Green's Prolegomena to Ethics; (5) the general history of Modern Hedonism; (6) The history of Political Theories from Hobbes to Rousseau.</p> <p>Candidates are, in addition, expected to offer for examination some book, subject, author, or period; or to submit a thesis on a subject in Philosophy, either in Logic or in Moral Philosophy, such thesis to be lodged by the candidate when entering his name for examination.</p>
<p>POLITICAL ECONOMY</p>	<p>The Lectures and Text-books of the session in which the student has attended the class.</p>	<p>In October, 1906, and until further notice the subjects of examination for Honours in ECONOMIC SCIENCE will be as follows :—</p> <p>I. Political Economy. The subjects of the Class Lectures, Ordinary and Advanced. Prescribed books: Bosanquet, <i>Philosophical Theory of the State</i>; Marshall, <i>Principles of Economics</i>; Bastable, <i>Public Finance</i>; Seligman, <i>Essays in Taxation</i>; Keynes, <i>Scope and Method of Political Economy</i>; Ingram, <i>History of Political Economy</i>; Nicholson, <i>Money and Monetary Problems</i>; Warner, <i>Landmarks of English Industrial History</i>; Menoranda on Classification and Influence of Imperial and Local Taxes (Blue-book), pp. 66—175; <i>British and Foreign Trade and Industry</i>—First Series, 1903, Second Series, 1904 (Board of Trade Blue-books). Candidates will be required to submit a thesis on some subject to be approved by the Professor.</p>
<p>HISTORY OF CIVIL LAW</p>	<p>The Class Lectures (see p. 134).</p>	<p>II. <i>Either (a) Moral Philosophy</i>—see the regulations for Honours in Moral Philosophy <i>et supra</i>.</p> <p>Or (b) History. The Course by the Lecturer on British History. British Economic History to be studied in Cunningham, <i>Growth of English Industry and Commerce</i>; and Ashley, <i>Economic History</i>.</p>
<p>PHILOSOPHY OF LAW</p>	<p>Holland's <i>Jurisprudence</i>. Maine's <i>Ancient Law</i>. Kant's <i>Philosophy of Law</i> (Hastie's translation).</p>	

IN	FOR ORDINARY DEGREE.	FOR HONOURS.
EDUCATION	<p>October, 1906.</p> <p>The Class Lectures; Bosanquet, <i>Education of the Young in the Republic of Plato</i>; Burnet, <i>Aristotle on Education</i>, pp. 1-11, 84-141; Adams, <i>Herbartian Psychology applied to Education</i>, chaps. II., III., IV., VI., X.; Herbert Spencer, <i>Education</i>; Thring, <i>Theory and Practice of Teaching</i>.</p> <p>April and October, 1907.</p> <p>The Class Lectures; Bosanquet, <i>Education of the Young in the Republic of Plato</i>; Burnet, <i>Aristotle on Education</i>, pp. 1-11, 84-141; Ascham, <i>Schoolmaster</i> (Cassell & Co.), pp. 10-105; Rousseau, <i>Emile</i>, Books II., III.; Adams, <i>Herbartian Psychology applied to Education</i>, chaps. II., III., IV., VI., X.; Herbert Spencer, <i>Education</i>.</p>	<p>In addition, Plane and Spherical Trigonometry; Analytical Geometry of two and three Dimensions; Differential and Integral Calculus; Differential Equations; and special subjects given in summer courses.</p>
MATHEMATICS	<p>Euclid, First Six Books; and Book XI, 1-21. Analytical Geometry of straight line and circle.</p> <p>Algebra, including Quadratic Equations, Progressions, and Binomial, Exponential, and Logarithmic Theorems.</p> <p>Plane Trigonometry, including the Solution of Triangles by the aid of Logarithmic tables.</p>	<p>Higher Dynamics (Statics and Kinetics of a particle and of a rigid body). In addition to the special subjects treated in the Higher Natural Philosophy Class (Division A) during the session of attendance, the candidate must profess a knowledge of one of the following:—Hydrodynamics, Conduction of Heat, Magnetism and Electricity, Light, Sound, Elasticity.</p> <p>The questions set will be such as to test the candidate's knowledge of Mathematical and Experimental Physics. It is to be understood that the Class Lectures are intended to be merely an aid to the student's reading and independent work, and are not to be expected to be directly or exclusively the subject of examination in the branches of science of which they treat.</p>
NATURAL PHILOSOPHY	<p>The subjects explained in the class.</p> <p>Dynamics, Acoustics, Heat, Light, Magnetism, and Electricity.</p>	
ASTRONOMY	<p>The Professor's Lectures during the session or sessions in which the student has attended the class, and Popular Astronomy.</p>	

IN	FOR ORDINARY DEGREE.	FOR HONOURS.
CHEMISTRY	<p>Theory: Principles of Chemistry, Chemistry of the Non-Metallic and the Principal Metallic Elements. Outlines of Organic Chemistry.</p> <p>Practical: Inorganic preparations. Qualitative analysis, including mixtures.</p> <p>Text-books: Newth's <i>Inorganic Chemistry</i> or Bloxam's <i>Chemistry</i> or Richter's <i>Inorganic Chemistry</i>; Ramsay's <i>Modern Chemistry</i>; Perkin and Kipping's <i>Organic Chemistry</i> or Remsen's <i>Organic Chemistry</i>.</p>	
ZOOLOGY	<p>The Elementary Lectures and Practical Work.</p> <p>Text-books by Shipley & MacBride; Marshall & Hurst; Wallace's <i>Darwinism</i>; Weismann's <i>Evolution Theory</i>.</p>	
BOTANY	<p>An adequate knowledge of the Elements of Botany will be expected together with a general knowledge of Classification of Plants, and especially of the following natural orders of Phanerogams: Taxaceae, Pinaceae; Junaceae, Liliaceae, Anaryllidaceae, Iridaceae, Araceae, Cyperaceae, Gramineae, Alismaceae, Potamogetonaceae, Orchidaceae; Salicaceae, Cupuliferae, Urticaceae, Polygonaceae, Chenopodiaceae, Caryophyllaceae, Ranunculaceae, Nymphaeaceae, Cruciferae, Papaveraceae, Violaceae, Hypericaceae, Drusaceae, Malvaceae, Geraniaceae, Euphorbiaceae, Umbelliferae, Saxifragaceae, Rosaceae, Leguminosae, Loranthaceae; Ericaceae, Primulaceae, Apocynaceae, Boraginaceae, Solanaceae, Scrophulariaceae, Labiate, Rubiaceae, Valerianaceae, Cuminaceae, Composite.</p> <p>The following books are suggested: Strasburger, <i>Text-Book of Botany</i> (second English edition); Scott, <i>Structural Botany</i>; Willis, <i>Flowering Plants and Ferns</i>; Hooker, <i>Student's Flora of the British Islands</i>.</p>	
GEOLOGY ¹	<p>An adequate knowledge of the following: The Materials of the Earth's Crust; Physical Geology; Structural Geology; Elementary Palaeontology; Stratigraphy; Elementary Mineralogy; Soil; Water Supply; General Geology and Scenery of Scotland, with especial reference to the Glasgow Basin.</p>	

¹ The examination in this and the three preceding subjects will be oral and practical, as well as by written papers.

IN	FOR ORDINARY DEGREE.	FOR HONOURS.
<p>HISTORY</p>	<p>The Outlines of the History of England and Scotland to 1880.</p>	<p>Up to and including October, 1907.</p> <p>Candidates will be examined in the following subjects :—</p> <p>(1) British History to 1880. This subject includes the History of England and Scotland, the History of Ireland from the reign of Henry II., and the History of the Colonial Empire of Great Britain. (2) The General History of the English Constitution. (3) The Constitutional Law and Custom of Great Britain and the United States of America. Prescribed books : Dicey, <i>Law of the Constitution</i> ; Anson, <i>Law and Custom of the Constitution</i> ; Bryce, <i>American Commonwealth</i>. (4) The growth of the English Constitution to the close of the reign of Edward I. Prescribed book : Stubbs, <i>Select Charters</i>. (5) One of the following periods of Foreign History at the choice of the Candidate (a) 800-1272, (b) 1453-1648, (c) 1740-1878.</p>
<p>CONSTITUTIONAL LAW AND HISTORY</p>	<p>The Class Lectures with Taswell-Langmead's <i>English Constitutional History</i> and Dicey's <i>Law of the Constitution</i>.</p>	<p>Candidates may, in addition, submit through the Professor of History a thesis on some subject of British or Foreign History to be approved by the Board of Examiners for Honours in History. This should, as far as possible, be based on the leading original authorities on the subject of which it treats. Such thesis, when offered, will be considered as forming an integral part of the examination.</p>
<p>ROMAN LAW</p>	<p>Institutes of Justinian (ed. Moyle or Sanders), and the Class Lectures.</p> <p><i>Note.</i>—Candidates who aim at a degree in Law are recommended, in addition to the above, to profess <i>Dig.</i>, Lib. XVIII, Tit. I. The title is translated and annotated by Mackintosh—Roman Law of Sale.</p>	<p>N.B. In and after April, 1908, the following will be substituted for (5) :—Outlines of European History from A.D. 476.</p>

ORDINARY DEGREE OF M.A.

The following directions may be helpful to a Student in arranging his course :

- I. *A Student who has not passed the whole Preliminary Examination*, but who has passed the Higher Standard in either Latin or Greek or Mathematics, may attend the qualifying class in that subject, but may not offer himself for examination in it until he has passed the whole Preliminary Examination.

He cannot, however, proceed to Graduation until he has attended qualifying classes in the University for three academic years after he has completed his Preliminary Examination.

- II. *A Student who has passed the whole Preliminary Examination* must attend full courses in at least seven subjects, spread over at least three years, and must be examined in these subjects.

Of these subjects *three* must consist of one from each pair of the following alternatives :

- (1) Latin or Greek.
- (2) Logic or Moral Philosophy.
- (3) Mathematics or Natural Philosophy.

The *fourth* subject must consist of any of the above not already taken, or of Chemistry.

The *fifth* subject must be either English or a Modern Language, or History.

The *sixth* and *seventh* subjects may consist of any one not already taken, from those enumerated in Section IX. of the Ordinance, and for which teaching is provided.

- III. Students are advised to attend the qualifying classes which they select, as far as possible according to the following scheme :

First Year.	Second Year.	Third Year.	Fourth Year.
Any of the following: Latin. Greek. French. German. Italian. Celtic. History. Mathematics. Chemistry. Zoology. Botany. Geology.	Any of the former not already taken, together with Logic. Political Economy. Natural Philosophy. Hebrew. Arabic. English.	Any of the former not already taken, together with Moral Philosophy. Education. Constitutional Law. Roman Law. Astronomy.	Any of the former not already taken.

Caution.—Students who desire to attend a class in any Language other than Latin or Greek or English, must be careful,

In the case of French, German, or Italian, that they have passed the Preliminary Examination; and

In the case of Celtic, Hebrew, Arabic, or Syriac, that they have passed a specially qualifying Examination. For Hebrew and Arabic preparatory classes are held, and may be taken in the Students' first year.

For *Half-courses* see Section viii. (1) and (2) of the Ordinance.

DEGREE OF M.A. WITH HONOURS.

Students who propose to graduate with Honours may with advantage consult the following synopsis of the conditions attaching to the several Groups of Honours:—

I. The Degree of M.A. with Honours may be taken at present in any of the following *Groups*, there being two subjects in each Group:

- (a) Classics, viz. $\begin{cases} (1) \text{ Latin.} \\ (2) \text{ Greek.} \end{cases}$
- (b) Mental Philosophy, viz. $\begin{cases} (1) \text{ Logic.} \\ (2) \text{ Moral Philosophy.} \end{cases}$
- (c) Mathematics and Natural Philosophy, viz. $\begin{cases} (1) \text{ Mathematics.} \\ (2) \text{ Natural Philosophy.} \end{cases}$
- (d) Semitic Languages, viz. $\begin{cases} \text{Hebrew.} \\ \text{Arabic.} \end{cases}$
- (e) [Indian Languages.]
- (f) English, viz. $\begin{cases} (1) \text{ English Language and Literature.} \\ (2) \text{ British History.} \end{cases}$
- (g) Modern Languages, viz. $\begin{cases} (1) \text{ French.} \\ (2) \text{ German.} \end{cases}$ or $\begin{cases} (1) \text{ French.} \\ (2) \text{ Italian.} \end{cases}$ or $\begin{cases} (1) \text{ German.} \\ (2) \text{ Italian.} \end{cases}$
- (h) History, viz. $\begin{cases} (1) \text{ History.} \\ (2) \text{ Constitutional Law and History.} \end{cases}$
- (i) Economic Science, viz. $\begin{cases} (1) \text{ Political Economy.} \\ (2) \text{ Moral Philosophy, or History.} \end{cases}$

II. *Conditions of Examination:*

- (1) The whole examinations necessary for graduation with Honours must be taken within five years from the date of the Candidate's first matriculation after having passed the Preliminary Examination, unless that period shall be extended by the Senatus on special cause shown.
- (2) The Candidate is examined in at least five subjects. (a) *Two* of these are his two *Honours* subjects (e.g. Logic and Moral Philosophy, if his group is Mental Philosophy). The examinations in the Honours subjects must be taken at one time, and not until the Candidate has obtained his certificate of attendance on the ordinary class of Latin or Greek. (b) In the other *three* subjects the examination is that for the *Ordinary* degree. The Candidate may offer himself for examination in them, together or apart, at any time or times during his curriculum, after he has attended the appropriate classes.

- (3) Under the restrictions noted below [see (4) and III. (2)], the Candidate may choose his three Ordinary degree subjects from the following list :

Latin.	Logic and Metaphysics.	Chemistry.
Greek.	Moral Philosophy.	Zoology.
English.	Political Economy.	Botany.
French.	Education (Theory,	Geology.
German.	History, and Art of).	History.
Italian.	Mathematics.	Constitutional Law and History.
Hebrew.	Natural Philosophy.	Civil, i.e. Roman Law.
Arabic.	Astronomy.	

- (4) Candidates in the various Honours Groups are restricted in their choice among the Ordinary Degree subjects to the following extent. They must choose

In Group (a) *Classics*: one subject from each of the following sets of Ordinary classes :

- (i) Logic, Moral Philosophy, Political Economy, Education.
- (ii) Mathematics, Natural Philosophy, Astronomy, Chemistry, Zoology, Botany, Geology.
- (iii) Any subject for the Degree except the two already chosen.

In Group (b) *Mental Philosophy*: one subject from each of the following sets of Ordinary classes :

- (i) Latin, Greek. If the Greek class has not been attended and the examination for Ordinary Degree on Greek passed, the student who chooses Latin as his subject in this set is required to pass a special examination in Greek, and this special examination he must pass before he offers himself for the Honours examination. [See the paragraph to which the first footnote on p. 217 refers.]
- (ii) Mathematics, Natural Philosophy, Astronomy, Chemistry, Zoology, Botany, Geology.
- (iii) Any subject for the Degree except the two already chosen.

In Group (c) *Mathematics and Natural Philosophy*: one subject from each of the following sets of Ordinary classes :

- (i) Latin, Greek.
- (ii) Logic, Moral Philosophy, Political Economy, Education.
- (iii) Any subject for the Degree except the two already chosen.

In Group (d) *Semitic Languages*: one subject from each of the following sets of Ordinary classes ;

- (i) Latin, Greek.
- (ii) Logic, Moral Philosophy, Political Economy, Education.
- (iii) Mathematics, Natural Philosophy, Astronomy, Chemistry, Zoology, Botany, Geology.

In Groups (f) *English*,
 (g) *Modern*
 Languages,
 (h) *History*,
 { one subject from each of the following
 sets of Ordinary classes :
 (i) Latin, Greek.
 (ii) Logic, Moral Philosophy.
 (iii) Mathematics, Natural Philosophy.

In Group (i) *Economic Science*: if History be the second subject chosen, one subject from each of the following sets of Ordinary classes:

- (i) Latin, Greek.
- (ii) Logic, Moral Philosophy.
- (iii) Mathematics, Natural Philosophy.

If Moral Philosophy be the second subject chosen, one subject from each of the following sets of Ordinary classes:

- (i) Latin, Greek.
- (ii) Mathematics, Natural Philosophy.
- (iii) A half course in the History of Civil Law combined with a half course in Philosophy of Law, or any subject for the Degree except those already chosen. [See III. (2) below.]

III. *Attendance.*

- (1) The Candidate must attend two classes, one of which shall be an Honours class, in each of his two *Honours* subjects, these two subjects being taught by separate Professors or Lecturers; and he cannot take an Honours class in a subject before, or in the same session as, an Ordinary class in that subject. All Honours classes meet on not less than fifty days in a session.
- (2) In order to qualify for his Ordinary degree examinations in the other three subjects, the candidate must attend classes in them. Most of the classes for the Ordinary degree meet on not less than one hundred days in a session. In place of such a full course, two half courses, each involving not less than fifty meetings, may be taken. The subjects in which half courses may be taken are: Latin, Greek, Hebrew, Arabic, Mathematics, Astronomy. A half course in any of these subjects can be combined only with a second half course in the same subject. There is also a half course in Philosophy of Law and in the History of Civil Law, and these two can be combined to form one subject, but only by those who select Moral Philosophy in the Group of Economic Science.

IV. *Additional Regulations* with regard to Degree of M.A. with Honours.

- (1) A candidate who has obtained Honours in any one Group may, whether he has graduated or not, present himself again for examination in a second Honours Group. He is required to attend two additional classes, which shall be Honours Classes, in this second Group.
- (2) A Candidate who has passed the seven examinations necessary for the ordinary Degree of Master of Arts, whether he has graduated or not, may, without attending further classes, present himself for Honours within five years from the date of his first matriculation after having passed the Preliminary Examination: but he must satisfy the requirements as to subjects set out above under II. (4).
- (3) No one shall be allowed to present himself a second time as a candidate for the Degree of Master of Arts with Honours, who, upon examination, has failed to obtain Honours.

TABLE OF EXAMINATIONS FOR THE DEGREE OF M.A., TO BE HELD DURING SESSION 1906-7.

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DATES OF EXAMINATIONS FOR MASTER OF ARTS.

Names to be given in and Fees paid to Assistant-Clerk (Matriculation Office). Date.			Dates of Written Examinations and Hours at which the different Papers will be set.	
FEE.	Subjects of Examination.		September—October, 1906.	March—April, 1907.
13th September or 14th March	Astronomy,	-	Saturday, 29th Sept., 9—12 noon.	Saturday, 30th March, 9—12 noon.
	Geology,	-	Do., do., 1—3 p.m.	Do., do., 1—3 p.m.
	Zoology,	-	Monday, 1st Oct., 9—12 noon.	Monday, 1st April, 9—12 noon.
	Astronomy,	-	Do., do., 9—12 noon.	Do., do., 9—12 noon.
	Chemistry,	-	Do., do., 2—5 p.m.	Do., do., 2—5 p.m.
	Geology,	-	Do., do., 6—9 p.m.	Do., do., 6—9 p.m.
	Botany,	-	Tuesday, 2nd Oct., 9—12 noon.	Tuesday, 2nd April, 9—12 noon.
	Geology (Practical),	-	Do., do., 2—5 p.m.	Do., do., 2—5 p.m.
	Mathematics (Ord. and Hon.),	-	Fri., 28th Sept., 9—12 noon & 3—6 p.m.	Fri., 20th Mar., 9—12 noon & 3—6 p.m.
	Education,	-	Sat., 29th Sept., 9—12 noon & 3—6 p.m.	Sat., 30th Mar., 9—12 noon & 3—6 p.m.
	History (Hon.),	-	Mon., 1st Oct., 9—12 noon & 2—5 p.m.	Mon., 1st April, 9—12 noon & 2—5 p.m.
	Constitutional Law & History,	-	Do., do., 9—12 noon.	Do., do., 9—12 noon.
	Roman Law,	-	Do., do., 2—5 p.m.	Do., do., 2—5 p.m.
	Mathematics (Hon.),	-	Do., do., 3—5 p.m.	Do., do., 3—5 p.m.
	History (Hon.),	-	Tue., 2nd Oct., 9—12 noon & 2—5 p.m.	Tue., 2nd April, 9—12 noon & 2—5 p.m.
	Moral Philosophy (Ord. & Hon.),	-	Do., do., 9—12 noon.	Do., do., 9—12 noon.
	Moral Philosophy (Hon.),	-	Do., do., 2—5 p.m.	Do., do., 2—5 p.m.
	History (Ord.),	-	Wed., 3rd Oct., 9—12 noon & 2—5 p.m.	Wed., 3rd April, 9—12 noon & 2—5 p.m.
	Logic (Hon.),	-	Do., do., 9—12 noon.	Do., do., 9—12 noon.
	Political Economy,	-	Do., do., 2—5 p.m.	Do., do., 2—5 p.m.
10th September or 12th March	History (Ord. and Hon.),	-	Do., do., 6—9 p.m.	Do., do., 6—9 p.m.
	English Literature (Hon.),	-	Thur., 4th Oct., 9—12 noon & 2—5 p.m.	Thur., 4th April, 9—12 noon & 2—5 p.m.
	Mental Philosophy (Hon.),	-	Do., do., 9—12 noon & 2—5 p.m.	Do., do., 9—12 noon & 2—5 p.m.
	Nat. Philosophy (Ord. & Hon.),	-	Do., do., 2—6 p.m.	Do., do., 2—6 p.m.
	English Literature (Hon.),	-	Fri., 5th Oct., 9—12 noon & 2—5 p.m.	Fri., 5th April, 9—12 noon & 2—5 p.m.
	French (Hon.),	-	Do., do., 9—12 noon.	Do., do., 9—12 noon.
	German (Hon.),	-	Do., do., 2—5 p.m.	Do., do., 2—5 p.m.
	Eng. Literature (Ord. & Hon.),	-	Sat., 6th Oct., 9—12 noon.	Sat., 6th April, 9—12 noon.
	English Literature (Hon.),	-	Do., do., 2—6 p.m.	Do., do., 2—6 p.m.
	Latin and Greek (Hon.),	-	Do., do., 2—5 p.m.	Do., do., 2—5 p.m.
	Natural Philosophy (Hon.),	-	Mon., 8th Oct., 9—11, 12—2, & 3—5 p.m.	Mon., 8th April, 9—11, 12—2, & 3—5 p.m.
	Latin (Ord.),	-	Do., do., 9—12 noon & 2—5 p.m.	Do., do., 9—12 noon & 2—5 p.m.
	German (Ord. and Hon.),	-	Tue., 9th Oct., 9—12 noon & 2—5 p.m.	Tue., 9th April, 9—12 noon & 2—5 p.m.
	French (Ord. and Hon.),	-	Wed., 10th Oct., 9—12 noon & 2—5 p.m.	Wed., 10th April, 9—12 noon & 2—5 p.m.
	Greek (Ord.),	-	Thur., 11th Oct., 9—11, 12—2, & 3—5 p.m.	Thur., 11th April, 9—11, 12—2, & 3—5 p.m.
	Greek (Hon.),	-	Do., do., 9—12 noon & 2—5 p.m.	Do., do., 9—12 noon & 2—5 p.m.
	Latin and Greek (Oral),	-	Do., do., & following days at 11 a.m.	Do., do., & following days at 11 a.m.
	Hebrew,	-	Fri., 12th Oct., 9—12 noon & 2—5 p.m.	Fri., 12th April, 9—12 noon & 2—5 p.m.
	Modern Languages (Oral),	-	Mon., 15th Oct., & foll. days at 11 a.m.	Mon., 15th April, & foll. days at 11 a.m.

¹ For Women students, Miss Galloway, Queen Margaret College.

² When names are not given in, and fees are not paid on or before the stated dates, a late Entry Fee of Ten Shillings must be paid.

2.—GRADUATION IN SCIENCE.

The Scottish University Commissioners (1889) have ordained that two Degrees in Science may be conferred by each of the Universities of Scotland—viz., Bachelor of Science (B.Sc.) and Doctor of Science (D.Sc.). These Degrees may be given in Pure Science and in Applied Science.

Degrees in Pure Science.

The following are the provisions of Ordinances No. 12¹, No. 42, No. 44, and No. 155 as they apply to this University :—

I. Two Degrees in Science may be conferred by the University of Glasgow—viz., Bachelor of Science (B.Sc.) and Doctor of Science (D.Sc.).

II. Every candidate for the Degree of Bachelor of Science must pass the Preliminary Examination prescribed by Ordinance No. 11 (Regulations for Degrees in Arts); and the conditions with respect thereto imposed by that ordinance (see pp. 206—214, 219) are applicable in all respects to candidates for the Degree of Bachelor of Science, except as follows:—(1) French or German may be substituted for Latin or Greek [See also Ordinance No. 11, Section XXI.] ; (2) Mathematics must be passed on the higher standard;² (3) a degree in Arts (not being a degree *honoris causa tantum*) in any of the Universities of the United Kingdom, or in any Colonial or Foreign University specially recognised for the purpose by the University Court after consultation with the Senatus, exempts from the Preliminary Examination.

III. (1) Candidates for the Degree of Bachelor of Science must, in the course of not less than three academical years, attend at least seven courses of instruction, in subjects prescribed for examination under Sections VIII. and IX. below.

(2) Three of these courses must be in subjects prescribed for the First Science Examination under Section VIII.; and four must be in subjects prescribed for the Final Science Examination under Section IX.

IV. (1) Four of the seven courses must be taken in this University.

(2) Three may be taken in other Universities or Institutions approved by the University Court, or under teachers recognised by the University Court for purposes of graduation in Science: Provided that the fees for attendance at an approved Institution or under a recognised teacher in

¹ This ordinance was printed in full in the *University Calendar* for 1892-93, pp. 485-488, and the modifications made by Ordinance No. 42 were indicated, by means of square brackets, in the *University Calendar* for 1894-95.

² A student who, having passed the Arts Preliminary Examination in accordance with the provisions of Ordinance No. 11, has thereafter obtained a certificate of attendance on a qualifying class of Mathematics, shall not be required to pass any further examination in Mathematics as a condition of entering on the course of study for graduation in Science under the provisions of Ordinance No. 12. See Ordinance No. 44, Section V. Candidates for the Degree of B.Sc. in Pure Science may offer themselves for examination in Mathematics on the intermediate instead of on the higher standard; provided that in addition to the ancient or modern language already taken they also offer themselves for examination in a modern language as a fifth subject, such further examination to be on the standard prescribed by the Joint Board for the Medical Preliminary. Notwithstanding these provisions, candidates shall not be entitled to profess at the Final Science Examination Mathematics, Natural Philosophy, or Astronomy, unless they have passed the Preliminary Examination in Mathematics on the higher standard. See Ordinance No. 155, Section I.

Glasgow shall not be less than the fees exigible for the corresponding courses in the University.

V. All candidates, not matriculated students of the University, availing themselves of the permission to attend lectures at approved Institutions or by recognised teachers in Glasgow, shall at the commencement of each year of such attendance enrol their names in a book to be kept for that purpose in the University, paying a fee of the same amount as the Matriculation Fee paid by students of the University, and having in respect of such payment a right to the use of the Library of the University.

VI. (1) After receiving through the Faculty of Science the opinion of the Board of Studies, the Senatus determines from time to time the number of meetings of which a full course in any subject shall consist, and reports its determination to the University Court for its approval.

(2) After receiving through the Faculty of Science the opinion of the Board of Studies, the Senatus, with the approval of the University Court, may sanction half courses of not less than half the number of meetings which constitute a full course in the subject; but two half courses shall be held to be equivalent to a full course in such cases as the Senatus, with the approval of the University Court, may determine, and under such regulations as may from time to time be made for that purpose.

(3) It is the duty of each Professor and Lecturer annually at the end of each winter session to submit to the Board of Studies a scheme specifying what proportion of the courses shall be devoted to lectures, practical demonstrations, examinations, and tutorial work respectively. The Board of Studies shall transmit the schemes to the Faculty of Science, who shall submit them to the Senate with such observations as they may think fit to make thereon. The Senatus transmits such schemes, with such observations as it may think fit to make thereon, to the University Court for its approval.

(4) It is the duty of the Professors and Lecturers annually at the end of each winter session to submit to the Faculty of Science, for its consideration, a syllabus of the subjects and books proposed for the work of their classes during the next academical year. The Faculty of Science transmits such syllabus, with such observations as it may think fit to make thereon, to the Senatus for its approval.

VII. The provisions of the preceding section do not apply to approved institutions or recognised teachers outside Glasgow; but the University Court shall not grant or continue recognition to any institutions or teachers unless they shall be satisfied that their courses of instruction are equivalent to the courses sanctioned in the Universities of Scotland.

VIII. (1) There is a First Science Examination¹ in the three following subjects—viz., (1) Mathematics or Biology (*i.e.* Zoology and Botany); (2) Natural Philosophy; (3) Chemistry.

(2) The examination in all these subjects is the same as the examination in these subjects for the Ordinary Degree of Master of Arts.

(3) Candidates may present themselves in any one or more of these subjects at any examination held after they have attended a full course in the subject or subjects professed.

¹ This examination includes practical work in the subjects admitting of, or requiring it.

IX. (1) There is a Final Science Examination¹ on a higher standard in any three or more of the following subjects :—

- | | |
|---|--|
| 1. Mathematics. | 6. Physiology. |
| 2. Natural Philosophy. | 7. Geology, including Mineralogy. ² |
| 3. Astronomy. | 8. Zoology, including Comparative Anatomy. |
| 4. Chemistry. | 9. Botany, including Vegetable Physiology. |
| 5. Human Anatomy, including Anthropology. | |

(2) The standard of this examination shall be as nearly as possible equivalent to that of the examination for the Degree of Master of Arts with Honours, where the subjects are different; and where the subjects are the same the examination shall be identical.

(3) A subject already taken under the preceding section for the First Science Examination may be taken also under this section for the Final Science Examination.

(4) Candidates presenting themselves for this examination must have attended four full courses of higher instruction, including practical or laboratory work, in the subjects professed, subject always to the provisions of Sections VI. and VII. hereof.

(5) The Final Science Examination shall be taken not less than one year after the candidate has passed the First Science Examination.

The Senate, with the approval of the University Court, has framed the following regulation for the Final Science Examination, viz. : A candidate shall be allowed the option of presenting himself in any one subject for the Final Science Examination, or in two, or in three or more at one time, provided always that if the candidate select Mathematics and Natural Philosophy, these subjects shall be taken together in one examination, in accordance with Ordinance No. 11, Section XIII. (1) and Ordinance No. 12, Section IX. (2).

X. If a student, before passing the Preliminary Examination, has attended a class qualifying for graduation, the Senatus may, on special cause shown, permit him to count such class for graduation, on condition of his passing the full Preliminary Examination within such time thereafter as the Senatus may appoint, and in every case the Senatus shall make a report to the University Court setting forth the reasons for the relaxation.

XI. A candidate for the degree of Bachelor of Science shall not be deemed to have attended a class as part of the curriculum for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

XII. It is competent to the Examiners for the degree of Bachelor of Science to report that a candidate has passed with special distinction in one or more of the subjects professed by him: and in such a case a diploma shall be given setting forth the subjects in respect of which the degree has been granted, and the subject or subjects in which special distinction has been obtained.

¹ This examination includes practical work in the subjects admitting of, or requiring it.

² The higher course in Geology, including Mineralogy, consists of fifty lectures, together with practical Laboratory work.

DEGREE IN APPLIED SCIENCE.

XIII. Degrees in Applied Science may be instituted and conferred according to regulations to be laid down in special Ordinances applicable to each University by the Commissioners under the Universities (Scotland) Act, 1889; or after the expiry of their powers by the University Court in each University.

XIV. The provisions of Sections II. to VIII. of this Ordinance inclusive, in so far as they relate to the Preliminary and First Science Examinations, shall be applicable in all respects to degrees in Applied Science instituted as aforesaid, except where special provision is made to the contrary in the special Ordinances aforesaid.

DOCTORATE OF SCIENCE.

XV. Graduates of any University who have held the degree of Bachelor of Science for a term of five years, may offer themselves for the degree of Doctor of Science in the same University.

XVI. A candidate for the Degree of Doctor of Science shall present a thesis or a published memoir of work¹ to be approved by the Senatus (on the recommendation of the Faculty of Science when duly constituted): Provided that, if required by the Senatus, the candidate shall also be bound to pass such an examination as may from time to time be determined. [This examination is to be conducted by Examiners appointed under Ordinance No. 62, Section X. See page 266.]

The thesis shall be a record of original research undertaken by the candidate, and shall be accompanied by a declaration, signed by him, that the work has been done and the thesis composed by himself.²

GENERAL.

XVII. A student who, at the time when this ordinance shall come into operation, shall have completed a part of his course of study with a view to graduation in Science in any of the Scottish Universities under regulations in force at the time in such University, and shall thereafter complete his course of study and pass the necessary examinations in conformity with such regulations,³ or with the provisions of this ordinance, may become a candidate for the Degree of Bachelor of Science.

XVIII. The Degrees of Bachelor and Doctor of Science shall in no case be conferred on persons who have not complied with the conditions hereinbefore set forth, and shall not be conferred *honoris causa tantum*.

XIX. This ordinance came into force on 1st October, 1892.

¹ The Thesis must be lodged on or before 12th January.

² Each successful Candidate for the Degree of D.Sc. is required to furnish to the University a certain number of copies of his Thesis, either printed or satisfactorily multiplied from a type-written copy, the number of copies in each case to be fixed by the Senate.

³ Students who began their course previous to 1890 may qualify themselves for the Degree of B.Sc. under the old regulations, which are given in the *University Calendar* for 1884-85; those who began in 1890, or 1891, or 1892 may qualify under the regulations contained in the *Calendar* for 1892-93.

OUTLINE OF EXAMINATIONS FOR B.SC. IN PURE SCIENCE.

First Examination.

MATHEMATICS—see p. 229. ZOOLOGY—see p. 230.
 BOTANY—see p. 230. NATURAL PHILOSOPHY—see p. 229.
 CHEMISTRY—see p. 230.

Final Examination.

MATHEMATICS—see p. 229 (Honours in Arts).
 NATURAL PHILOSOPHY—see p. 229 (Honours in Arts).

ASTRONOMY.

The examination is partly written and partly practical. In the written examination the candidate has to show thorough knowledge of Spherical Astronomy as treated in the Junior course of the Professor's lectures, and comprehension of the principles developed in the Senior course of lectures on celestial Dynamics. The practical examination embraces calculation of the ephemeris of a planet (which can be made at any time at home), and the determination of time and latitude by transit instrument and sextant. Also see page 91.

CHEMISTRY.

The examination is partly written and oral, and partly practical. Principles and Theories of Chemistry; general inorganic and organic Chemistry; Elements of metallurgical and physical Chemistry. The practical examination embraces inorganic quantitative analysis, physical determinations such as molecular weight, organic analysis and preparations.

Books recommended:—Bloxam, *Chemistry*; or Thorpe, *Inorganic Chemistry*; or Richter, *Inorganic Chemistry*; Perkin & Kipping, *Organic Chemistry*; and Gatterman, *Practical Methods of Organic Chemistry*; Roberts-Austen, *Introduction to Metallurgy*; Walker, *Introduction to Physical Chemistry*.

HUMAN ANATOMY.

In the written examination the same paper is set for all candidates whether of Medicine or Science. But the oral examination for candidates in Science is distinct. The candidate is required to show knowledge of Human Anatomy, systematic, topographic, microscopic and embryological, and of Anthropology, especially the racial characters of skulls, but is not examined on the applications of Anatomy to Medicine and Surgery.

PHYSIOLOGY.

Candidates for the final B.Sc. in Physiology will be expected to show a general knowledge of Physiology such as may be obtained in *Halliburton's Text-book of Physiology*. In addition a candidate may specialise on the following subjects:

(1) Physiological Chemistry—(Text-books: *Halliburton* or *Hammersten*).

(2) Physiology of digestion and secretion—(Text-books: *Pawlow, Gamgee, and Leonard Hill*).

(3) Circulation and Respiration—(Text-books: *Schäfer, Leonard Hill*).

(4) Nervous System and Muscles—(Text-books: *Biedermann, Schäfer, Ferrier*).

(5) The Special Senses—(Text-books: *Helmholtz, Schäfer, M'Kendrick and Snodgrass*).

Candidates are expected to have a full knowledge of the special department chosen as above.

The Examination consists of a written paper of three hours and a practical and oral examination.

The practical examination will occupy six hours and will consist of exercises in (a) Physiological Chemistry, (b) Histology, and (c) Practical work on Muscle, Nerve, etc., such as is overtaken in the Advanced Practical Class.

This examination cannot be taken at the same time as the Second Professional Examination in Medicine.

GEOLOGY.

Candidates for the final B.Sc. in Geology will be required to show somewhat fuller knowledge of the subjects enumerated at p. 230; and in addition a more advanced knowledge of the principles and methods of petrography; the methods of palaeontology, as illustrated by the study of one special group of fossils; the stratigraphy of Scotland with especial reference to the Clyde basin and a knowledge of the principles of mining geology, including the study of ores and the chief economic mineral deposits, theories of Ore Deposition, the classification of ores, and the characters of some leading mining fields.

The essential laboratory text-book is *Cole's Aids in Practical Geology*, but candidates are expected to have read selected chapters from advanced text-books, general treatises and special memoirs, of which a list is supplied at the beginning of each session.

ZOOLOGY, INCLUDING COMPARATIVE ANATOMY.

Candidates for the final B.Sc. examination in Zoology are expected to show a general knowledge of the classification of the Animal Kingdom, and of the structural and developmental characters of its various subdivisions.

Questions upon a more advanced standard will be set in regard to the Zoology of the Vertebrata and to such topics as have been treated in the advanced lectures during the two preceding Winter Sessions. There is a Practical Examination of at least six hours, part of which is *viva voce*, in which, in addition to their general knowledge of Zoology, candidates will be expected to show a certain amount of ability to dissect and carry out the ordinary processes of laboratory technique.

Candidates will also be expected to show a knowledge of the more

general problems of Zoology, *e.g.* Evolutionary Theory, the principles of Zoogeography, the main data regarding the processes of maturation and conjugation of the germ cells, etc. Special lectures will be arranged so far as possible to deal with such general portions of the subject.

The following text-books are recommended in addition to those used by the elementary class:—

Text-book of Zoology by A. Sedgwick. *Comparative Anatomy of Vertebrates* by Wiedersheim.

For reference in regard to special groups, Korschelt & Heider's *Invertebrate Embryology*, Hertwig's *Embryology of Vertebrates*, *The Cambridge Natural History*, Lankester's *Zoology*.

Students are further recommended to read Weismann's *Evolution Theory*, and Darwin's *Origin of Species*.

BOTANY.

Candidates for the Final B.Sc. Examination in Botany will be expected to show an adequate knowledge of the External Morphology, Anatomy, and Physiology of Plants, and of the leading features in their Geological History. Also a general knowledge of the leading types, and classification of the main groups of Algæ, Fungi, Bryophyta, and Pteridophyta.

A knowledge of the leading characters of the following families of Phanerogams will also be expected:

Cycadaceæ, Ginkgoaceæ, Taxaceæ, Pinaceæ, Gnetaeæ. Juncaceæ, Liliaceæ, Amaryllidaceæ, Iridaceæ, Palmæ, Araceæ, Cyperaceæ, Gramineæ, Alismaceæ, Potamogetonaceæ, Musaceæ, Zingiberaceæ, Orchidaceæ. Salicaceæ, Cupuliferæ, Urticaceæ, Polygonaceæ, Chenopodiaceæ, Caryophyllaceæ, Ranunculaceæ, Nymphaeaceæ, Cruciferae, Papaveraceæ, Violaceæ, Hypericaceæ, Droseraceæ, Cactaceæ, Malvaceæ, Geraniaceæ, Rutaceæ, Sapindaceæ, Euphorbiaceæ, Umbelliferae, Saxifragaceæ, Rosaceæ, Leguminosæ, Myrtaceæ, Loranthaceæ. Ericaceæ, Primulaceæ, Apocynaceæ, Asclepiadaceæ, Boraginaceæ, Solanaceæ, Scrophulariaceæ, Labiatæ, Rubiaceæ, Valerianaceæ, Campanulaceæ, Compositæ.

The following books are suggested:—As a general text-book, Strasburger's *Textbook of Botany*, 2nd Engl. Ed. For more detailed information, especially of the Algæ and Fungi, Warming's *Systematic Botany*. For use in the garden, especially for flowering plants, Willis' *Flowering Plants and Ferns*, 2nd Edn. For field work, Hooker's *Students' Flora of the British Islands*.

The reading of Candidates should also extend to more special treatises, such as Scott's *Studies in Fossil Botany*; Schimper's *Plant Geography*, etc., as well as to original papers, such as are referred to in the bibliography of Strasburger's *Textbook*.

There will be two three-hour papers, and two practical examinations [three hours each].

Candidates will also be examined orally.

TABLE OF EXAMINATIONS FOR DEGREE OF B.Sc. IN PURE SCIENCE DURING SESSION 1906-7.

Names to be given in and Fees paid to Assistant-Clerk (Matriculation Office). Date. ²	Fee.	Subjects of Examination.	Dates of Written Examinations and Hours at which the different Papers will be set. The Oral Examinations in Science follow the Written at dates to be arranged.	
			September—October, 1906.	March—April, 1907.
13th September, 1906, or 14th March, 1907.	£1 1s. FOR EACH SUBJECT UNTIL 450s. SHALL HAVE BEEN PAID.	Math. (Ord. & Hon.),	Fri, 28th Sept., 9—12 noon & 3—6 p.m.	Fri., 29th Mar., 9—12 noon & 3—6 p.m.
		Astronomy, - - -	Saturday, 29th Sept., 9—12 noon.	Saturday, 30th Mar., 9—12 noon.
		Geology, - - -	Do., do., 1—3 p.m.	Do., do., 1—3 p.m.
		Zoology, - - -	Monday, 1st Oct., 9—12 noon.	Monday, 1st April, 9—12 noon.
		Astronomy, - - -	Do., do., 9—12 noon.	Do., do., 9—12 noon.
		Chemistry, - - -	Do., do., 2—5 p.m.	Do., do., 2—5 p.m.
		Mathematics (Hon.),	Do., do., 3—5 p.m.	Do., do., 3—5 p.m.
		Geology, - - -	Do., do., 6—9 p.m.	Do., do., 6—9 p.m.
		Botany, - - -	Tuesday, 2nd Oct., 9—12 noon.	Tuesday, 2nd April, 9—12 noon.
		Anatomy, - - -	Do., do., 9—10.30 a.m.	Do., do., 9—10.30 a.m.
		Physiology, - - -	Do., do., 2—5 p.m.	Do., do., 2—5 p.m.
		Geology (Practical),	Do., do., 2—5 p.m.	Do., do., 2—5 p.m.
		Nat. Phil. (Ord. & Hon.),	Fri., 5th Oct., 9—12 noon & 2—5 p.m.	Fri., 5th April, 9—12 noon & 2—5 p.m.
		Nat. Philosophy (Hon.),	Saturday, 6th Oct., 2—6 p.m.	Saturday, 6th April, 2—6 p.m.

¹For Women students, Miss Galloway, Queen Margaret College.²When Names are not given in and Fees are not paid on or before the stated dates, a late Entry Fee of Ten Shillings must be paid before the candidate can be admitted to examination. A candidate is not held to be entered for the examination until his name is entered, and all the necessary certificates, etc., lodged.

For Dates in regard to Science Preliminary Examination see page 211.

Degrees in Science in Engineering.

The following are the provisions of Ordinance No. 23, Glasgow No. 2:—

I. Two Degrees in Science in Engineering may be conferred by the University of Glasgow, viz., Bachelor of Science in Engineering¹ and Doctor of Science in Engineering.

II. Every candidate for the degree of Bachelor of Science in Engineering must pass the Preliminary Examination prescribed by Ordinance No. 11 (Regulations for degrees in Arts); and the conditions with respect thereto imposed by the said ordinance (see pp. 206—214, 219) are applicable in all respects to this ordinance except as follows:—(1) French or German may be substituted for Latin or Greek [see also Ordinance No. 11, Section XXI.]; (2) *Mathematics must be passed on the higher standard*; (3) a degree in Arts (not being a degree *honoris causa tantum*) in any of the Universities of the United Kingdom, or in any Colonial or Foreign University specially recognised for the purpose by the University Court after consultation with the Senatus Academicus, exempts from the Preliminary Examination; (4) the *Preliminary Examination must be passed before the candidate presents himself for any part of the First Science Examination, but not necessarily before the candidate enters on his curriculum.*

III. Candidates must in the course of not less than three academical years attend at least the nine courses of instruction prescribed under Section IX.

IV. (1) Five of the nine courses must be taken in this University. One of these courses must be a course in Engineering.

(2) Four may be taken in other Universities or institutions approved by the University Court, or under teachers recognised by the University Court for purposes of graduation in Science in Engineering: Provided that the fees for attendance at an approved institution in Glasgow or under a recognised teacher there shall not be less than the fees exigible for the corresponding courses in the University of Glasgow.

V. It is competent to the University Court to admit to the examinations for the degree of Bachelor of Science in Engineering, and to graduation, any candidate who presents the diploma of the Glasgow and West of Scotland Technical College, and who has passed the Preliminary Examination hereinbefore appointed: Provided that before such candidate shall be admitted to the Final Science Examination prescribed under Section XI. hereof:—

(1) He shall, after having received the said diploma, have attended in this University at least three full courses, during at least one academical year; and of these courses one at least shall be in Engineering.

¹ By order of the Council of the Institution of Civil Engineers the possession of the Degree of B.Sc. in Engineering exempts candidates applying for election into the Institution as Associate Members from passing the examination prescribed by the Council.

- (2) He shall, after having received the said diploma, have attended in this University such courses as will, along with the classes taken at the said College for the said diploma, be equivalent to the whole courses for the curriculum hereinafter instituted.

VI. The University Court may make regulations to enable candidates not matriculated students of the University availing themselves of the permission to attend Lectures at approved institutions or by recognised teachers in Glasgow, to obtain on payment of a fee not exceeding in amount the Matriculation Fee paid by the students of the University, a right to the use of the Library of the University.

VII. (1) The Senatus determines from time to time the number of meetings of which a full course in any subject shall consist, and reports its determination to the University Court for its approval.

(2) The Senatus, with the approval of the University Court, may sanction half courses of not less than half the number of meetings which constitute a full course in the subject; and two half courses shall be held to be equivalent to a full course in such cases as the Senatus, with the approval of the University Court, may determine, and under such regulations as may from time to time be made for that purpose.

(3) It is the duty of the Professors and Lecturers annually at the end of each winter session to submit to the Senatus a scheme specifying what proportion of the courses shall be devoted to lectures, practical demonstrations, examinations, and tutorial work respectively. The Senatus shall transmit such scheme, with such observations as it may think fit to make thereon, to the University Court for its approval.

(4) It is the duty of the Professors and Lecturers annually at the end of each winter session, to submit to the Faculty of Science, for its consideration, a syllabus of the subjects and books proposed for the work of their classes during the next academical year. The Faculty of Science shall transmit such syllabus, with such observations as it may think fit to make thereon, to the Senatus for its approval.

VIII. The provisions of the preceding section do not apply to approved institutions or recognised teachers outside Glasgow; but the University Court shall not grant or continue recognition to any institutions or teachers unless it shall be satisfied that their courses of instruction are equivalent to the courses sanctioned in the University of Glasgow.

IX. The subjects of study¹ shall be as follows:—

1. Mathematics, including Analytical Geometry, and Differential and Integral Calculus.
2. Natural Philosophy, including Applied Higher Mathematics.
3. Chemistry.
4. A course in the Physical Laboratory,² or in the Chemical Laboratory, or of Practical Chemistry.

¹ The words in *italics* in this section are modifications which the University Court, on representations by the Senate, made by virtue of the power conferred upon the Court by Section XIV. of this Ordinance.

² The Physical Laboratory must have been taken previously by those who take Electrical Engineering under 5, 6.

and either:—

5, 6. Two courses in Engineering,¹ including Laboratory Practice.

7, 8. Two courses of practical work in Drawing.

9. A course in one of the following:—

(a) Astronomy and Geodesy.

(b) Geology and Mineralogy.

(c) Naval Architecture.

(d) Engineering Laboratory, Mechanical or Electrical (Special Course). [*This laboratory course cannot be taken concurrently with either of the laboratory courses specified under 5, 6.*]

(e) Electricity—Pure and Applied.

(f) *Mining Engineering* (Class I. or Class II.).

(g) *Any half-course in Engineering not already taken under 5, 6.*

or:—

5, 6. Two courses in Naval Architecture with Marine Engineering.

7, 8. Two courses of practical work in Ship and Engineering Drawing.

9. A course in Engineering, including Laboratory Practice.

Provided that during the three years immediately subsequent to the date on which this ordinance shall come into force, the courses in Engineering herein prescribed shall not necessarily include Laboratory Practice.

IXA.² *The following is the curriculum for the Degree of B.Sc. in Mining Engineering:—*

FIRST YEAR: *Mathematics (Ordinary); Natural Philosophy (Ordinary); Chemistry; Chemical Laboratory; Mining, Class I. (50 meetings).*

SECOND YEAR: *Engineering, Class I.; Engineering, Class II. or III.; Mining, Class II. (50 meetings); Drawing; Geology and Mineralogy.*

THIRD YEAR: *Electrical Engineering, Class I.; Metallurgy; Metallurgical Laboratory; Mining, Class III. (25 meetings); Engineering Laboratory.*

*Provided that practical work in a mine shall be required of every candidate for the Degree of B.Sc. in Mining Engineering to such an extent and under such regulations as the Senate, with the approval of the University Court, may from time to time appoint.*³

Under this proviso, the following regulations, proposed by the Senate, were approved by the University Court:

1. Practical work in a mine shall be required for two periods of three months each, and the candidate must not be under sixteen years of age at the time of commencing this practical work.

¹The Physical Laboratory must have been taken previously by those who take Electrical Engineering under 5, 6.

²This curriculum, having been arranged by the Senate, was sanctioned by the University Court on 18th June, 1903, in virtue of the power belonging to the Court according to Section XIV. of this Ordinance.

³This amending paragraph was added by the University Court on 21st July, 1904.

2. The candidate must produce evidence satisfactory to the Senate, that he has fulfilled this requirement.¹

X. (1) There shall be a First Science Examination² in subjects 1, 2, 3, and 4 of the section immediately preceding.

(2) The examination in (1) Mathematics and (2) Natural Philosophy shall include the higher branches of Mathematics specified under Mathematics and the higher Mathematics included under Natural Philosophy in the section immediately preceding;² but it shall be optional to candidates to pass the same examination in either or both of these subjects as that required for the Ordinary Degree of Master of Arts: Provided that in that case they shall be required before graduation to pass a subsequent examination in the remainder of the subject or subjects.

(3) Candidates may present themselves in any one or more of the subjects of the First Science Examination at any examination held after they have attended a full course in the subject or subjects professed.

XI. (1) There shall be a Final Science Examination³ in subjects 5, 6, 7, 8, and 9 of Section IX. hereof; and, if required, in the higher branches of Mathematics as provided in Section X., Sub-section 2 hereof.

(2) Candidates may present themselves in any one or more of these subjects at any examination held after they have passed the First Science Examination and have attended the required courses in the subject or subjects professed: Provided that for this purpose subjects 5, 6, 7, and 8, specified in Section IX. hereof shall be deemed one subject.

XII. A candidate for the degree of Bachelor of Science in Engineering shall not be deemed to have attended a class as part of the curriculum for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

XIII. It is competent to the Examiners for the degree of Bachelor of Science in Engineering to report that a candidate has passed with special distinction in one or more of the subjects professed by him; and in such a case a diploma shall be given setting forth the subjects in respect of which the degree has been granted, and the subject or subjects in which special distinction has been obtained.

XIV. It is competent to the University Court of the University of Glasgow to modify from time to time the provisions as to curriculum

¹The Secretary of State for the Home Department, on 29th September, 1904, approved of the University of Glasgow in respect of the Degree of B.Sc. in Mining Engineering and of the Certificate of Proficiency in Mining Engineering for the purposes of the Coal Mines Regulation Act (1887) Amendment Act, 1903.

²The Senate has authorised the Examiners in Mathematics and Natural Philosophy to return as having passed in the elementary part of either or both of these subjects any candidate who has attempted the examination in the higher branches of either or both and has failed to pass, provided that in the opinion of the Examiners the candidate has attained a standard equivalent to that required for the ordinary Degree of M.A.

³This examination includes practical work in the subjects admitting of, or requiring it: Provided that, in the case of Engineering Students, a practical examination shall be passed in Chemistry or Physics according as the Chemical or the Physical Laboratory Course has been chosen as part of the qualifying curriculum.

hereinbefore contained, in case such modification shall be rendered desirable by the development of Engineering science, or in consequence of further provisions having been made within or without the University for the study of any special branch of the said Science: Provided that in no case shall the number of full courses of study required be less than the number required for the Degree of Bachelor of Science in Pure Science, as specified in Ordinance No. 12.

DOCTORATE OF SCIENCE IN ENGINEERING.

XV. Graduates of the University of Glasgow who have held the degree of Bachelor of Science in Engineering for a term of five years, may offer themselves for the degree of Doctor of Science in Engineering in the said University.

XVI. A candidate for the Degree of Doctor of Science in Engineering shall present a thesis or a published memoir or work¹ to be approved by the Senatus (on the recommendation of the Faculty of Science when duly constituted): Provided that, if required by the Senatus, the candidate shall be bound to pass such an examination as may from time to time be determined.

The thesis shall be a record of original research undertaken by the candidate, or of important engineering work designed by himself, and actually carried out, and shall be accompanied by a declaration, signed by him, that these conditions have been satisfied.²

GENERAL.

XVII. Candidates who produce certificates that they have satisfied all the conditions prescribed by this ordinance, and who have passed the necessary examinations, shall be entitled to receive the degrees of Bachelor of Science in Engineering and Doctor of Science in Engineering, as the case may be, on payment of the fees required.

XVIII. A student who, at the time when this ordinance shall come into operation, shall have completed a part of his course of study with a view to graduation in Science in Engineering in the University of Glasgow, under regulations in force at the time therein, and shall thereafter complete his course of study and pass the necessary examinations in conformity with such regulations,³ or with the provisions of this Ordinance, may become a candidate for the degree of Bachelor of Science in Engineering.

XIX. The degrees of Bachelor and Doctor of Science in Engineering shall in no case be conferred on persons who have not complied with the conditions hereinbefore set forth, and shall not be conferred *honoris causa tantum*.

XX. This Ordinance came into force from and after the date on which it was approved by Her Majesty in Council, viz., 26th June, 1893.

¹ The Thesis must be lodged on or before 12th January.

² See second note on page 240.

³ Students who began their course previous to 1890 may qualify themselves for the Degree of B.Sc. under the old regulations, which are given in the *University Calendar* for 1884-85; those who began in 1890, or 1891, or 1892 may qualify under the regulations contained in the *Calendar* for 1892-93.

TABLE OF EXAMINATION FOR DEGREE OF B.Sc., IN ENGINEERING DURING SESSION 1906-7.

Names to be given in and fees paid to Assistant-Clerk 1 (Matriculation Office). Date. ²	FEE.	Subjects of Examination.	Dates of Written Examinations and Hours at which the different Papers will be set. The Oral Examinations in Science follow the Written at dates to be arranged.	
			September—October, 1906.	March—April, 1907.
13th September, 1906, or 14th March, 1907.	£1 1s. FOR EACH SUBJECT UNTIL £5 0s. SHALL HAVE BEEN PAID.	Math. (Ord. & Hon.).	Fri., 28th Sept., 9-12 noon & 3-6 p.m.	Fri., 29th Mar., 9-12 noon & 3-5 p.m.
		Astronomy.	Sat., 29th Sept., 9-12 noon.	Sat., 30 March, 9-12 noon.
		Geology.	Do., do., 1-3 p.m.	Do., do., 1-3 p.m.
		Astronomy.	Mon., 1st Oct., 9-12 noon.	Mon., 1st April, 9-12 noon.
		Engineering Laboratory.	Do., do., 2-5 p.m.	Do., do., 2-5 p.m.
		Do. (Special).	Do., do., 2-5 p.m.	Do., do., 2-5 p.m.
		Electrical Engineering.	Do., do., 2-5 p.m.	Do., do., 2-5 p.m.
		Chemistry.	Do., do., 2-5 p.m.	Do., do., 2-5 p.m.
		Mining I.	Do., do., 3-5 p.m.	Do., do., 3-5 p.m.
		Mathematics (Hon.).	Do., do., 3-5 p.m.	Do., do., 3-5 p.m.
		Geology.	Do., do., 6-9 p.m.	Do., do., 6-9 p.m.
		Engineering Drawing.	Tues., 2nd Oct., 9-12 noon & 2-5 p.m.	Tue., 2nd April, 9-12 noon & 2-5 p.m.
		Naval Architecture.	Do., do., 9-11 a.m.	Do., do., 9-11 a.m.
		Ship Drawing, etc.	Do., do., 2-5 p.m.	Do., do., 2-5 p.m.
		Mining II.	Do., do., 2-5 p.m.	Do., do., 2-5 p.m.
		Geology (Practical).	Do., do., 2-5 p.m.	Do., do., 2-5 p.m.
		Engineering.	Wed., 3rd Oct., 9-11 a.m. & 3-5 p.m.	Wed., 3rd April, 9-11 a.m. & 3-5 p.m.
		Electrical Engineering.	Do., do., 3-5 p.m.	Do., do., 3-5 p.m.
		Engineering.	Thurs., 4th Oct., 9-11 a.m. & 2-5 p.m.	Thurs., 4th April, 9-11 a.m. & 2-5 p.m.
		Mining III.	Do., do., 2-5 p.m.	Do., do., 2-5 p.m.
		Nat. Phil. (Ord. & Hon.).	Fri., 5th Oct., 9-12 noon & 2-5 p.m.	Fri., 5 April, 9-12 noon & 2-5 p.m.
		Nat. Phil. (Hon.).	Sat., 6th Oct., 2-5 p.m.	Sat., 6 April, 2-5 p.m.

¹ For Women students, Miss Galloway, Queen Margaret College.² When names are not given in and Fees are not paid on or before the stated dates, a late Entry Fee of Ten Shillings must be paid before the candidate can be admitted to examination. A candidate is not held to be entered for the examination until his name is entered, the fee paid, and all the necessary certificates, etc., lodged.

For Dates in regard to Science Preliminary Examination see page 211.

Degrees in Science in Agriculture.

The regulations for the Degree of Bachelor of Science in Agriculture are contained in Ordinance No. 134 of the Universities Commission (1889), and are as follows:—

I. A degree of Bachelor of Science in Agriculture may be conferred by the University of Glasgow.

II. Every candidate for the degree of Bachelor of Science in Agriculture must pass the Preliminary Examination prescribed by Ordinance No. 11 [General, No. 6—Regulations for Degrees in Arts]; and the conditions with respect thereto imposed by the said Ordinance (see pp. 206—214, 219) shall be applicable in all respects to this Ordinance except as follows:—(1) French or German may be substituted for Latin or Greek; (2) Mathematics shall be passed on the higher standard;¹ (3) a degree in Arts (not being a degree *honoris causâ tantum*) in any of the Universities of the United Kingdom, or in any Colonial or Foreign University specially recognised for the purpose by the University Court after consultation with the Senatus Academicus, shall exempt from the Preliminary Examination; (4) the Preliminary Examination must be passed before the candidate presents himself for any part of the First Science Examination, but not necessarily before the candidate enters on his curriculum.

III. (1) Candidates must in the course of not less than three Academic years, within the meaning of the Ordinance hereinbefore first mentioned, attend at least twelve courses of instruction, in the subjects specified in Section VIII. of this Ordinance.

(2) It shall be the duty of the Senatus to determine from time to time which of the said courses shall be full courses and which shall be half courses respectively, and also to determine the number of meetings of which such full courses and half courses respectively shall consist, and to report its determination to the University Court for its approval.

Under this subsection the Senate, with the approval of the University Court, has determined that of the subjects specified in Section VIII. of this Ordinance, Nos. 1, 2, 3, 4, 5, 6 and 10 shall be taught in full courses, and Nos. 7, 8, 9, 11 (a), 11 (b), 11 (c) and 12 in half courses, and that the number of meetings shall be those inserted in square brackets in Section VIII. opposite the several subjects.

IV. (1) Five full courses or their equivalent (counting two half courses as one full course) must be taken in the University of Glasgow. The course in Agriculture and Rural Economy must also be taken in the University of Glasgow, if instruction in the said subjects be provided in the University, or in the West of Scotland Agricultural

¹Candidates for the Degree of B.Sc. in Agriculture may offer themselves for examination in Mathematics on the intermediate instead of on the higher standard: provided that in addition to the ancient or modern language already taken they also offer themselves for examination in a modern language as a fifth subject, such further examination to be on the standard prescribed by the Joint Board for the Medical Preliminary.

College¹: Provided always that that course in the said College shall be accepted as equivalent to a course in the University, subject to the following conditions:—

- (a) The Senatus Academicus shall be represented on the governing body of the Agricultural College.¹
- (b) All future appointments to the Chair of Agriculture in the Agricultural College¹ shall be vested in a Joint Committee, consisting of three members of the University Court and of three members of the governing body of the Agricultural College.¹
- (2) The remainder of the said courses may be taken in other Universities or Institutions approved by the University Court, or under teachers recognised by the University Court for purposes of graduation in Science in Agriculture: Provided that the fees for attendance at an approved Institution in Glasgow or under a recognised teacher there shall not be less than the fees exigible for the corresponding courses in the University of Glasgow.

(3) Residence and practical work at a farm shall be required of each candidate to such an extent and under such regulations as the Senatus, with the approval of the University Court, may from time to time appoint.

Under this subsection the following regulations have been made by the Senate, with the approval of the University Court.

1. Residence and practical work at a farm for twelve months shall be required, and the candidate must not be under sixteen years of age when he commences the residence.

2. The residence must be for twelve consecutive months, except in special cases in which the Senate may grant recognition of residence during two shorter periods amounting together to at least twelve months.

3. The candidate must produce evidence, satisfactory to the Senate, that he has fulfilled these regulations.

V. All students availing themselves of the permission to attend the lectures of the teachers in the various departments of Agriculture in the West of Scotland Agricultural College, or of teachers in other approved institutions in Glasgow, or of other recognised teachers in Glasgow, must, at the commencement of each year of such attendance, enrol their names in a book to be kept in the University for that purpose, paying a fee of the same amount as the matriculation fee paid by the students of the University, and having in respect of such payment a right to the use of the Library of the University.

VI. (1) It shall be the duty of the Professors and Lecturers annually, at the end of each winter session, to submit to the Senatus a scheme specifying what proportion of the courses shall be devoted to lectures, practical demonstrations, examinations, and tutorial work respectively. The Senatus shall transmit such scheme, with such observations as it may think fit to make thereon, to the University Court for its approval.

¹ An ordinance was framed by the University Court on 6th August, 1900, and approved by His Majesty in Council on 24th July, 1901, which substituted the West of Scotland Agricultural College for the Glasgow and West of Scotland Technical College.

(2) It shall be the duty of the Professors and Lecturers annually, at the end of each winter session, to submit to the Faculty of Science for its consideration a syllabus of the subjects and books proposed for the work of their classes during the next Academical year. The Faculty of Science shall transmit such syllabus, with such observations as it may think fit to make thereon, to the Senatus for its approval.

VII. The provisions of the immediately preceding section shall not apply to approved institutions or recognised teachers outside Glasgow; but the University Court shall not grant or continue recognition to any institutions or teachers unless it shall be satisfied that their courses of instruction are equivalent to the courses sanctioned in the University of Glasgow, where such exist.

VIII. The subjects of study shall be as follows:—

1. $\left\{ \begin{array}{l} \text{Mathematics [100 meetings].} \\ \text{or Biology, i.e., } \left\{ \begin{array}{l} \text{Zoology [100 meetings, viz., 50 lectures and 50} \\ \text{and practical].} \\ \text{Botany, [100 meetings, viz., 50 lectures and 50} \\ \text{practical].} \end{array} \right. \end{array} \right.$
2. Natural Philosophy [100 meetings].
3. Chemistry [100 meetings and three months in Chemical Laboratory].
4. Agriculture and Rural Economy [100 meetings].
5. Agricultural Chemistry [100 meetings, viz., 50 lectures and 50 practical].
6. Geology [80 meetings, including 50 lectures and 28 practical demonstrations].
7. Veterinary Hygiene [50 meetings].
8. Agricultural Botany [50 meetings].
9. Agricultural Entomology [25 meetings].
10. Economic Science as applied to Agriculture [100 meetings].¹
11. One of the following:—
 - (a) Forestry [50 meetings].
 - (b) Experimental Physics [50 meetings].
 - (c) Engineering [50 meetings].
12. Engineering Field Work [50 meetings].

IX. (1) There shall be a First Science Examination in the three following subjects—viz., (1) Mathematics or Biology (*i.e.*, Zoology and Botany); (2) Natural Philosophy; (3) Chemistry.

(2) The examination in all these subjects shall be the same as the examination in these subjects for the degree of Bachelor of Science,

¹ The Glasgow and West of Scotland Technical College contemplates the institution of a special class for the teaching of this subject in 50 meetings. Until this special class shall be instituted candidates are required to attend the ordinary class of Political Economy [100 meetings]. After both classes are available students will have the option of taking either. In the examination prescribed under Section X. every candidate shall be required to work a paper of questions on Economic Science as applied to Agriculture.

under the provisions of Ordinance No. 12 [General, No. 7—Regulations for Degrees in Science].

(3) Candidates may present themselves in any one or more of the subjects of the First Science Examination at any examination held after they have attended a full course in the subject or subjects professed.

X. (1) There shall be a Final Science Examination¹ in the remaining subjects (4 to 12 inclusive) specified in Section VIII. hereof.

(2) Candidates may present themselves in any one or more of these subjects at any examination held after they have passed the whole of the subjects comprised in the First Science Examination, and have attended the required courses in the subjects professed.

XI. A candidate for the degree of Bachelor of Science in Agriculture shall not be deemed to have attended a class as part of the Curriculum for that degree who does not present a certificate bearing, not only that he has given regular attendance, but also that he has duly performed the work of the class.

XII. The Examiners for the degree of Bachelor of Science in Agriculture shall be the Professors of the subjects in the Curriculum in the University of Glasgow, the Professor of Agriculture in the West of Scotland Agricultural College, and such additional Examiners as the University Court shall see fit to appoint.

GENERAL.

XIII. Candidates who produce certificates that they have satisfied all the conditions prescribed by this Ordinance, and who have passed the necessary examinations, shall be entitled to receive the degree of Bachelor of Science in Agriculture, on payment of the fees required.

XIV. The degree of Bachelor of Science in Agriculture shall in no case be conferred on persons who have not complied with the conditions hereinbefore set forth, and shall not be conferred *honoris causâ tantum*.

XV. This ordinance came into force from and after the date on which it was approved by Her Majesty in Council, viz., 13th August, 1895.

¹ The examination in Agricultural Botany, Agricultural Entomology, and Experimental Physics, may be practical.

TABLE OF EXAMINATIONS FOR DEGREE OF B.S.C. IN AGRICULTURE DURING SESSION 1906-7.

Names to be given in and Fees paid to Assistant-Clerk 1 (Matriculation Office). Date. ²	Fee.	Subjects of Examination.	Dates of Written Examinations and Hours at which the different Papers will be set. The Oral Examinations in Science follow the Written at dates to be arranged.	
			September—October, 1906.	March—April, 1907.
13th September, 1906, or 14th March, 1907.	£1 1s. FOR EACH SUBJECT UNTIL £6 6s. SHALL HAVE BEEN PAID.	Mathematics, - - -	Fri., 28th Sept., 9—12 noon & 3—6 p.m.	Fri., 29th March, 9—12 noon & 3—6 p.m.
		Geology, - - -	Sat., 29th Sept., 1—3 p.m.	Sat., 30th March, 1—3 p.m.
		Zoology, - - -	Mon., 1st Oct., 9—12 noon.	Mon., 1st April, 9—12 noon.
		Chemistry, - - -	Do., do., 2—5 p.m.	Do., do., 2—5 p.m.
		Geology, - - -	Do., do., 6—9 p.m.	Do., do., 6—9 p.m.
		Botany, - - -	Tues., 2nd Oct., 9—12 noon.	Tues., 2nd April, 9—12 noon.
		Engineering, - - -	Wed., 3rd Oct., 9—11 a.m. & 3—5 p.m.	Wed., 3rd April, 9—11 a.m. and 3—5 p.m.
		Economic Science, -	Do., do., 6—9 p.m.	Do., do., 6—9 p.m.
		Natural Philosophy, -	Fri., 5th Oct., 9—12 noon & 2—5 p.m.	Fri., 5th April, 9—12 noon and 2—5 p.m.
		Agriculture, - - -	Do., do., 9—12 noon.	Do., do., 9—12 noon.
		Agric. Entomology, -	Do., do., 2—5 p.m.	Do., do., 2—5 p.m.
		Veterinary Hygiene, -	Sat., 6th Oct., 9—12 noon.	Sat., 6th Apr., 9—12 noon.

¹For Women students, Miss Galloway, Queen Margaret College.

²When Names are not given in and Fees are not paid on or before the stated dates, a late Entry Fee of Ten Shillings must be paid before the candidate can be admitted to examination. A candidate is not held to be entered for the examination until his name is entered, the fee paid, and all the necessary certificates, etc., lodged.

For Dates in regard to Science Preliminary Examination see page 211.

Degrees in Science in Public Health.

The following are the provisions of Ordinance No. 2 made by the University Court:—

I. Two degrees in Science in Public Health shall be conferred by the University of Glasgow, viz.: Bachelor of Science in Public Health (B.Sc. Pub. Health) and Doctor of Science in Public Health (D.Sc. Pub. Health).

B.SC. IN PUBLIC HEALTH.

II. Candidates for the degree of Bachelor of Science in Public Health must be graduates in Medicine of a University of the United Kingdom, or of some other University recognised for the purpose by the University Court of the University of Glasgow.

III. Candidates must be matriculated for the year in which they appear for examination or graduation.

IV. Candidates shall be admitted to the Degree of Bachelor of Science in Public Health, only after they have fulfilled the following conditions, viz.: they must produce evidence

(1) That, after their graduation in Medicine, they have received practical instruction, including instruction in Chemistry, Bacteriology, and the Pathology of the Diseases of Animals transmissible to man, for at least twenty hours per week during a period of not less than eight months, of which at least five consecutive months must be in the Public Health Laboratory of the University of Glasgow, and the remainder in the foresaid Laboratory, or in a Public Health Laboratory recognised for the purpose by the University Court;

(2) That they have attended either before or after graduation in Medicine, such courses on (*a*) Physics and (*b*) Geology, either in the University of Glasgow or elsewhere, as would qualify for graduation in Science or Arts in the said University; or have attended in said University or any other Scottish University in addition to the course in Physics qualifying for graduation in Medicine, such further course in Physics as the Senatus Academicus, with the approval of the University Court, shall deem necessary, and such a course in Geology extending over not less than three months, as the Senatus with the like approval shall deem sufficient and appropriate.

(3) That after their graduation in Medicine they have attended two separate courses in Public Health, one course dealing with Medicine and consisting of seventy-five meetings of the class, the other with Engineering and consisting of twenty-five meetings of the class, each in its relation to Public Health, in such manner as the Senatus Academicus, with the approval of the University Court, shall determine.

(4) That after their graduation in Medicine they have for six months,

three of which must be continuous, practically studied sanitary work under the supervision of :

- (a) In England and Wales, the Medical Officer of Health of a County or of a single Sanitary District having a population of not less than 50,000, or a Medical Officer of health devoting his whole time to Public Health work ; or
- (b) In Scotland, a Medical Officer of Health of a County or Counties, or of one or more Sanitary Districts having a population of not less than 30,000 ; or
- (c) In Ireland, a Medical Superintendent Officer of Health of a District or Districts having a population of not less than 30,000 ; or
- (d) A Medical Officer of Health who is also a Teacher in the Department of Public Health of a recognised Medical School.

Half of the above period must be devoted solely to the study of sanitary work as aforesaid ; the other half partly to the same study.

(5) That after their graduation in Medicine they have attended during three months the practice of an Hospital for Infectious Diseases in an Hospital at which opportunities are afforded for the study of Methods of Administration, recognised for the purpose by the University Court ; and

(6) That they have had three months' instruction in Mensuration and Drawing under a teacher recognised for the purpose by the University Court.

V.¹ Each candidate shall be examined both in writing and orally, and also practically where the nature of the subject admits in the following divisions, viz. : *First*, in (a) Public Health Laboratory work, (b) Physics, and (c) Geology, if an examination in Physics or Geology, as the case may be, qualifying for graduation either in Science or Arts has not previously been passed by the Candidate ; *Second*, in (a) Sanitation, including reports on dwellings, workshops, hospitals, and sanitary schemes generally, (b) Sanitary Law, (c) Vital Statistics, and (d) Medicine in its bearings on Public Health, and the examinations in these subjects shall be taken at one time.

VI. Candidates who have passed their examinations in the subjects comprised in the first division shall not be admitted to examination in the second division sooner than eighteen months after having taken their degree in Medicine, nor sooner than six months after having passed the first examination.

VII. The Board of Studies for the Faculty of Science along with the Lecturer or Professor of Public Health shall from time to time, with the approval of the Senatus and the University Court, determine and announce the character of the instruction to be given in the Laboratory, and shall fix the standard of the examinations.

¹ The Senate, with the approval of the University Court, has made, under Ordinance No 13, the following regulation :—A period of not less than twelve months shall have elapsed between the attainment of a registrable qualification in Medicine, Surgery, and Midwifery, and the admission of the candidate to any examination, or any part thereof, for the Degree of B.Sc. in Public Health.

VIII. It shall also be competent for the University Court, after consultation with the Senatus, to modify from time to time the provisions as to the work and instruction hereinbefore specified as necessary for graduating in Science in Public Health, in case such modification shall be rendered desirable by the development of the Science of Public Health, or by increase of the facilities provided in the said University or elsewhere for the study of any branch of the said Science.

IX. The Examiners for graduation in Science for the Degree of B.Sc. in Public Health in the University of Glasgow shall be the Professors in that University whose subjects qualify for graduation in Science, together with such Lecturers in the University, and such additional Examiners to be appointed by the University Court as the University Court shall deem necessary, provided that the Court shall make such provision as will ensure that every candidate shall be examined in each subject by at least two Examiners, of whom one shall not be a Professor or Lecturer in the University. Provided also that the Examination under Section V. in Sanitation, including reports of dwellings, workshops, and hospitals, and sanitary schemes generally, shall be conducted by two Examiners, one of whom shall be a Medical Officer of Health, and the other shall be the Professor of, or Lecturer on, Public Health in the University.

D.SC. IN PUBLIC HEALTH.

X. Graduates who have held the degree of Bachelor of Science in Public Health from the University of Glasgow for a term of five years, may offer themselves for the Degree of Doctor of Science in Public Health in the said University.

XI. Each candidate for the degree of Doctor of Science in Public Health shall present a thesis or a published memoir or work to be approved by the Senatus, on the recommendation of the Faculty of Science, and shall also be required to pass an examination in Public Health, and in such of its special departments as the Senatus, with the approval of the University Court, by regulations framed from time to time, shall determine.

The thesis, or published memoir or work, shall be a record of original research undertaken by the candidate, and shall be accompanied by a declaration, signed by him, that the work has been done, and the thesis or memoir composed by himself.¹

XII. The Senatus Academicus shall appoint such Professors or Lecturers as it may think suitable to conduct the examination of candidates who may offer themselves under the provisions of this Ordinance for the Degree of Doctor of Science, and the University Court shall, after consultation with the Senatus Academicus, appoint such additional Examiners as they deem necessary to act along with them. Such additional Examiners shall be persons of recognised eminence in the subject of the thesis, or memoir, or work which is to be submitted for approval, and may be Professors or Lecturers in any Scottish University other than the University of Glasgow.

¹ See second note on page 240

XIII. The thesis, memoir, or work submitted by a candidate for the Degree of Doctor of Science shall in each case be examined by the additional Examiner to be appointed by the University Court, as well as by the Examiners to be appointed by the Senatus under the provisions of Section XII. of this Ordinance.

XIV. The result of the examination of the thesis, memoir, or work submitted by a candidate, as well as the result of the Examination prescribed under Section XI. of this Ordinance, shall be reported to the Faculty of Science.

GENERAL.

XV. Candidates who produce certificates bearing that, either before or after, or partly before and partly after, the date at which this Ordinance shall come into force, they have satisfied the conditions prescribed by this Ordinance, and who have passed the necessary examinations, shall be entitled to receive the degrees of Bachelor of Science in Public Health and Doctor of Science in Public Health, as the case may be, on payment of the fees required.

XVI. The degrees of Bachelor and Doctor of Science in Public Health shall in no case be conferred on persons who have not complied with the conditions hereinbefore set forth, and shall not be conferred *honoris causâ tantum*.

XVII. This Ordinance shall come into force from and after the date on which it is approved by His Majesty in Council.

Approved, 20th May, 1903.

TABLE OF EXAMINATIONS FOR DEGREE OF B.Sc. IN PUBLIC HEALTH DURING SESSION 1906-7.

Names to be given in and Fees paid to Assistant-Clerk 1 (Matriculation Office). Date. ²	FEE.	Subjects of Examination.	Dates of Written Examinations and Hours at which the different Papers will be set. The Oral Examinations in Science follow the Written at dates to be arranged.	
			September—October, 1906.	March—April, 1907.
13th September, 1906, or 14th March, 1907.	£1 1s. FOR EACH SUBJECT UNTIL £5 6s. £1 1s. FOR EACH SUBJECT PAID.	Geology,	Sat., 29th Sept., 1—3 p.m.	Sat., 30th Mar., 1—3 p.m.
		Do.,	Mon., 1st Oct., 6—9 p.m.	Mon., 1st April, 6—9 p.m.
		Public Health Laboratory,	Tues., 2nd Oct., 9—4 p.m.	Tues., 2nd April, 9—4 p.m.
		Do., do.,	Wed., 3rd Oct., 9—12 noon.	Wed., 3rd April, 9—12 noon.
		Vital Statistics,	Do., do., 9—11 a.m.	Do., do., 9—11 a.m.
		Sanitary Law,	Do., do., 12—2 p.m.	Do., do., 12—2 p.m.
		Medicine in relation to Public Health,	Thurs., 4th Oct., 9—11 a.m.	Thurs., 4th April, 9—11 a.m.
		Practical Sanitation, . .	Do., do., 2—4 p.m.	Do., do., 2—4 p.m.

¹ For Women students, Miss Galloway, Queen Margaret College.

² When Names are not given in and Fees are not paid on or before the stated dates, a late Entry Fee of Ten Shillings must be paid before the candidate can be admitted to examination. A candidate is not held to be entered for the examination until his name is entered, the fee paid, and all the necessary certificates, etc., lodged.

CERTIFICATES OF PROFICIENCY IN ENGINEERING SCIENCE.

Certificates of Proficiency in Engineering Science will be granted to students who shall have gone through the following course of study, practical work, and examinations, to the satisfaction of the Board of Examiners :—

1. Mathematics, including Analytical Geometry and Differential and Integral Calculus.
2. Natural Philosophy—the work of the Ordinary Class.
3. Chemistry.

And either :—

- 4, 5. Two courses in Engineering, including Laboratory Practice.
- 6, 7. Two courses of practical work in Drawing.
8. A course in one of the following :—
 - (a) Astronomy and Geodesy.
 - (b) Geology and Mineralogy.
 - (c) Naval Architecture.
 - (d) Engineering Laboratory, Mechanical or Electrical (special course). [This laboratory course cannot be taken concurrently with either of the laboratory courses specified under 4, 5.]
 - (e) Electricity—Pure and Applied.
 - (f) Mining Engineering (Class I. or Class II.).
 - (g) Any half course in Engineering not already taken under 4, 5.

Or :—

- 4, 5. Two courses in Naval Architecture with Marine Engineering.
- 6, 7. Two courses of practical work in Ship and Engineering Drawing.
8. A course in Engineering, including Laboratory Practice.

Certificates of Proficiency in Mining Engineering will be granted to students who shall have gone through the following course of study, practical work, and examinations, to the satisfaction of the Board of Examiners :—

FIRST YEAR: Mathematics (Ordinary); Natural Philosophy (Ordinary); Chemistry; Chemical Laboratory; Mining, Class I. (50 meetings).

SECOND YEAR: Engineering, Class I.; Engineering, Class II. or III.; Mining, Class II. (50 meetings); Drawing; Geology and Mineralogy.

THIRD YEAR: Electrical Engineering, Class I.; Metallurgy; Metallurgical Laboratory; Mining, Class III. (25 meetings); Engineering Laboratory.

No candidate is admitted to the special examination for either certificate, in any department, till he has given regular attendance upon, and duly performed the work of the prescribed course of study in that department.

DIPLOMA IN EDUCATION.

The following regulations drawn up by the Senate were approved by the University Court on 26th April, 1900 :

1. Candidates for the Diploma in Education must be graduates¹ in Arts

¹ Women who have been placed in the Class-lists of one or other of the Final Honours Examinations in the University of Oxford or the University of Cambridge shall be deemed to be graduates for the purpose of these regulations.

or Science of a University in the United Kingdom, or of some other University recognised for this purpose by the University Court.

2. The diploma is of two grades: (a) General Diploma, and (b) Diploma with Distinction.

3. The general diploma is open to any graduate in Arts or Science who fulfils the following requirements:

- (a) In addition to the curriculum for his Degree he must give attendance on a full course and pass the Degree examination on the same, subject to the condition that the regulations applicable to this additional course as a Degree course shall be fulfilled. This additional course may be taken at any time either before or after graduation.
- (b) The Education course must in every case either constitute part of his Degree curriculum, or be the additional course prescribed in the preceding subsection.
- (c) He must produce evidence either (1) that he has attended a course of Practical Instruction as a King's Student under the Local Committee for the Training of Teachers or as a King's Scholar in a Training College for Teachers, or (2) that he has gone through a course of Practical Training under the Local Committee or in a Training College for Teachers—the course to extend over five months (not less than eight hours weekly), and to include instruction in School management, Practice in teaching, and a series of Model and Criticism Lessons.¹
- (d) He must pass a Written examination, conducted by the University, in School Management and Organisation and Methodology, and give proof of his practical skill by conducting a class to the satisfaction of an Examiner or Examiners appointed by the University.

N.B.—The general Diploma is recognized by the Scotch Education Department as qualifying (in the case of graduates of the University of Glasgow) for employment in Public Schools. Graduates of this University who obtain the Diploma and desire recognition as Certificated Teachers must satisfy the Department of their physical capacity, and must produce satisfactory evidence as to age in the manner prescribed by the rules made under section 6 of the Elementary School Teachers (Supernumeration) Act, 1898. Early application should be made to the Department for such recognition if it is desired.

4. The Diploma with Distinction is open to any holder of an ordinary degree in Arts, any graduate in Arts with Honours, or any graduate in Science, who fulfils the requirements of the preceding regulation, and in addition passes an examination on the method of teaching one or more of the following groups of subjects as taught in Secondary Schools, viz. (a) Classics; (b) Mathematics; (c) Science; (d) English, including History; (e) French and German: Provided always that the holder of an ordinary Degree in Arts before being admitted to the examination on the method of teaching shall be required to pass an examination equivalent to an Honours or to a Final Science examination in the group or groups of subjects selected by him.

¹ Acting Teachers who produce their Parchment Certificates, or who produce evidence of having taught with success in Secondary Schools for two years, shall be held to have complied with this regulation, and may, on fulfilling the other requirements, receive the Diploma.

5. The Fee for the Diploma is Two Guineas.

Examinations for the Diploma will be held on Friday, 16th November, 1906, from 9 a.m. to 12 noon, and from 2 p.m. to 5 p.m.; and on Friday, 3rd May, 1907, from 9 a.m. to 12 noon, and from 2 p.m. to 5 p.m. Candidates for the General Diploma take the forenoon paper only. Name of candidates to be given in to the Assistant-Clerk, Matriculation Office, on 5th November, 1906, or on 19th April, 1907.

3.—HIGHER DEGREES IN ARTS AND SCIENCE.

In Ordinance No. 62, issued on 15th February, 1895, and approved by Her Majesty in Council on 29th June, 1895, the Universities Commission made the following regulations for Higher Degrees in Arts and Science :—

DEGREE OF D.Sc.

I. Graduates who have taken the degree of Master of Arts in any Scottish University with first or second class honours in Mathematics and Natural Philosophy under the conditions prescribed by Ordinance No. 11 (Regulations for degrees in Arts), or under the regulations previously in force in such University, may offer themselves for the degree of Doctor of Science (D.Sc.) in the same University after the expiry of five years from the date of their graduation in Arts, under the same conditions as if they held the degree of Bachelor of Science.

II. Research Students within the meaning of Ordinance No. 61 (Regulations for the Encouragement of Special Study and Research and for the appointment of Research Fellows) may offer themselves for the degree of Doctor of Science of the University in which they have prosecuted some special study or research under that ordinance, although they have not taken the degree of Bachelor of Science or the degree of Master of Arts with Honours as aforesaid, in that University: Provided—

- (1) That they hold the degree of Bachelor of Science or Bachelor of Medicine of a Scottish or any recognized University, or a degree of any such University, which the Senatus Academicus shall hold to be equivalent to the degree of Bachelor of Science or to the degree of Master of Arts with first or second class honours in Mathematics and Natural Philosophy: Provided that candidates who hold any such degree from a University outside the United Kingdom may be required, if the Senatus think fit, before beginning their course as Research Students with a view to the degree of Doctor of Science, to pass an examination equivalent to an Honours or to a Final Science Examination in a group of subjects cognate to their line of work as Research Students.
- (2) That they have spent not less than two winter sessions or an equivalent period as Research Students in the University granting the degree, and that they produce evidence of satisfactory progress in the special study or research undertaken by them during that period.
- (3) That a period of not less than five years shall have elapsed from the date of the graduation required in sub-section (1) of this section.

III. All candidates for the degree of Doctor of Science shall present a thesis or a published memoir or work,¹ to be approved by the Senatus on the recommendation of the Faculty of Science²: Provided that, if required by the Senatus, the candidate shall also be bound to pass such an examination conducted orally or practically, or by written papers, or by all of these methods, on the subjects of his special study or of his thesis, as may from time to time be determined. The thesis shall be a record of original research undertaken by the candidate, and shall be accompanied by a declaration signed by him that the work has been done and the thesis composed by himself.³

DEGREE OF D. PHIL.

IV. Graduates who have taken the degree of Master of Arts in any Scottish University with first or second class honours in Mental Philosophy, under the conditions prescribed by Ordinance No. 11 (Regulations for Degrees in Arts), or under the regulations previously in force in such University, may offer themselves for the degree of Doctor of Philosophy (D.Phil.) in the same University after the expiry of five years from the date of such graduation.

V. Research Students as aforesaid may offer themselves for the degree of Doctor of Philosophy of the University in which they have prosecuted some special study under Ordinance No. 61 (Regulations for the Encouragement of Special Study and Research, and for the appointment of Research Fellows), although they have not taken the degree of Master of Arts with Honours as aforesaid in that University: Provided—

- (1) That they hold the degree of Master of Arts with first or second class honours in Mental Philosophy of any Scottish University, or a degree of any recognised University, which the Senatus Academicus shall hold to be equivalent to such degree with honours as aforesaid: Provided that candidates who hold such a degree from a University outside the United Kingdom may be required, if the Senatus think fit, before beginning their course as Research Students, with a view to the degree of Doctor of Philosophy, to pass an examination equivalent to an honours examination in a group of subjects cognate to their line of work as Research Students.
- (2) That they have spent not less than two winter sessions or an equivalent period as Research Students in the University granting the degree, and produce evidence of satisfactory progress in the special study undertaken by them during that period.
- (3) That a period of not less than five years shall have elapsed from the date of the graduation required in sub-section (1) of this section.

¹ The Thesis must be lodged and the fees paid on or before 12th January.

² Ordinance No. 167, which was issued by the Universities Commission on 24th June, 1897, and which was approved by Her Majesty in Council on 19th May, 1898, requires that the thesis, memoir, or work shall in each case be examined by the additional examiner to be appointed by the University Court under Ordinance No. 62, Section X., as well as by the examiner or examiners to be appointed by the Senatus under Ordinance No. 62, Section IX. (*sic*).

³ See second note on page 240.

VI. All candidates for the degree of Doctor of Philosophy shall present a thesis or a published memoir or work,¹ which shall be an original contribution to learning, to be approved by the Senatus Academicus on the recommendation of a Committee appointed by the Senatus:² Provided that, if required by the Senatus, a candidate shall also be bound to pass such examination, conducted orally or otherwise, on the subject of his thesis or of his special study as may from time to time be determined. The thesis, or memoir, or work shall be accompanied by a declaration signed by the candidate that it has been composed by himself. If the thesis has not already been published, it shall be published by the candidate in such manner as the Senatus shall approve.

DEGREE OF D.LITT.

VII. Graduates who have taken the degree of Master of Arts in any Scottish University with first or second class honours in any group other than Mathematics and Natural Philosophy or Mental Philosophy, under the conditions prescribed by Ordinance No. 11 (Regulations for Degrees in Arts), or under the regulations previously in force in such University, may offer themselves for the degree of Doctor of Letters (D.Litt.) in the same University after the expiry of five years from the date of such graduation.

VIII. Research Students as aforesaid may offer themselves for the degree of Doctor of Letters of the University in which they have prosecuted some special study under Ordinance No. 61 (Regulations for the Encouragement of Special Study and Research, and for the appointment of Research Fellows), although they have not taken the degree of Master of Arts with Honours as aforesaid in that University: Provided—

- (1) That they hold the degree of Master of Arts with first or second class honours in any group except Mathematics and Natural Philosophy or Mental Philosophy of any Scottish University, or a degree of any recognised University, which the Senatus Academicus shall hold to be equivalent to such degree with honours as aforesaid: Provided that candidates who hold such a degree from a University outside the United Kingdom may be required, if the Senatus think fit, before beginning their course as Research Students with a view to the degree of Doctor of Letters, to pass an examination equivalent to an honours examination in a group of subjects cognate to their line of work as Research Students.
- (2) That they have spent not less than two winter sessions or an equivalent period as Research Students in the University granting the degree, and produce evidence of satisfactory progress in the special study undertaken by them during that period.
- (3) That a period of not less than five years shall have elapsed from the date of the graduation required in sub-section (1) of this section.

¹ See first footnote on p. 264.

² Ordinance No. 167, which was issued by the Universities Commission on 24th June, 1897, and which was approved by Her Majesty in Council on 19th May, 1898, requires that the thesis, memoir, or work shall in each case be examined by the additional examiner to be appointed by the University Court under Ordinance No. 62, Section X., as well as by the examiner or examiners to be appointed by the Senatus under Ordinance No. 62, Section IX. (*sic*).

IX. All candidates for the degree of Doctor of Letters shall present a thesis or a published memoir or work,¹ which shall be an original contribution to learning, to be approved by the Senatus Academicus on the recommendation of a Committee appointed by the Senatus²: Provided that, if required by the Senatus, a candidate shall also be bound to pass such examination, conducted orally or otherwise, on the subject of his thesis or of his special study as may from time to time be determined. The thesis, or memoir, or work shall be accompanied by a declaration signed by the candidate that it has been composed by himself. If the thesis has not already been published, it shall be published by the candidate in such manner as the Senatus shall approve.

GENERAL.

X. The Senatus Academicus in each University shall appoint such Professors or Lecturers as it may think suitable to conduct the examination of candidates who may offer themselves under the provisions either of Ordinance No. 12 (Regulations for Degrees in Science) or of this ordinance, for the degree of Doctor of Science, Doctor of Philosophy, or Doctor of Letters; and the University Court shall, after consultation with the Senatus Academicus, appoint an additional Examiner to act along with them.³ Such additional Examiner shall be a person of recognised eminence in the subject of the thesis, or memoir, or work which is to be submitted for approval. The result of the examination shall be reported to the appropriate Faculty or Committee of Senatus.

XI. The Degrees of Doctor of Science in Mental Science or Doctor of Science in Philology shall no longer be conferred by any Scottish University.

XII. Candidates who have already completed the necessary attendance on classes required for the degree of Doctor of Science in Mental Science or Doctor of Science in Philology, under regulations hitherto in force in any Scottish University, may proceed to the degree of Doctor of Philosophy, or of Doctor of Letters, as the case may be, under this ordinance: Provided such candidates comply with the provisions of Section VI. or Section IX. hereof, as the case may be, and that a period of not less than five years shall have elapsed from the date of their graduation as Masters of Arts.

XIII. The degrees of Doctor of Science, Doctor of Philosophy, and Doctor of Letters shall in no case be conferred on persons who have not satisfied the conditions hereinbefore set forth, and shall not be conferred *honoris causa tantum*.

¹ See first footnote on p. 264.

² Ordinance No. 167, which was issued by the Universities Commission on 24th June, 1897, and which was approved by Her Majesty in Council on 19th May, 1898, requires that the thesis, memoir, or work shall in each case be examined by the additional examiner to be appointed by the University Court under Ordinance No. 62, Section X., as well as by the examiner or examiners to be appointed by the Senatus under Ordinance No. 62, Section IX. (*sic*)

³ Ordinance No. 167, which was issued by the Universities Commission on 24th June, 1897, and which was approved by Her Majesty in Council on 19th May, 1898, empowers the University Court to appoint, as additional examiners under this section, persons who are Professors or Lecturers in any Scottish University other than the University granting the degree.

XIV. The fee to be paid for the degree of Doctor of Philosophy shall be ten guineas.

XV. The fee to be paid for the degree of Doctor of Letters shall be ten guineas.

4.—GRADUATION IN MEDICINE AND SURGERY.

The Degrees in Medicine and Surgery conferred by this University are all recognised by the Medical Acts as qualifying for practice throughout the British dominions, and for admission to the Army, Navy, and Public Medical Service.

Every student who began medical studies previous to 1st January, 1892, is entitled to graduate under the system in force before or after that date, according as he shall comply with the regulations in force in the University before¹ or after that date. All others must fulfil the requirements of the new ordinance—(Ordinance No. 14, Glasgow No. 1—Regulations for Degrees in Medicine)—the principal provisions of which are as follows:—

I. Four degrees in Medicine and Surgery are conferred by the University of Glasgow, viz., Bachelor of Medicine (M.B.), Bachelor of Surgery (Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M.). The Degree of Bachelor of Surgery shall not be conferred on any person who does not at the same time obtain the Degree of Bachelor of Medicine, and the Degree of Bachelor of Medicine shall not be conferred on any person who does not at the same time obtain the Degree of Bachelor of Surgery.

II. Subject to regulations to be made from time to time by the University Court, the University may also confer diplomas in Special Branches of Medical and Surgical Practice on graduates of the University in Medicine and Surgery.

III. Before commencing his medical studies, each student shall pass a Preliminary Examination in (1) English, (2) Latin, (3) Elementary Mathematics, and (4) Greek or French or German: Provided always that, in the case of a candidate whose native language is not English, an examination in the native language of the candidate may be substituted for one in either French or German, and an examination in any other classical language for one in Latin or Greek.²

IV. The extent and standard of the Preliminary Examination shall be determined by the Joint-Board of Examiners constituted under Ordinance No. 13 (Regulations as to Examinations) in accordance with the terms of that ordinance.

¹ These regulations may be found at pp. 188—192 of the *University Calendar* for session 1895-96, and in the *Calendars* for preceding sessions.

² The candidate for the Degrees of Bachelor of Medicine and Bachelor of Surgery must have been registered in the books of the General Medical Council at least five years prior to the date of his graduation. In order to be so registered he must transmit to James Robertson, Esq., the Scottish Branch Registrar, 54 George Square, Edinburgh, together with a printed form of application, which may be obtained from the Assistant Clerk (Matriculation Office, University), a certificate of having passed the Preliminary Examination, and satisfactory evidence of the applicant having attained the age of sixteen years.

Under this section the Joint-Board have directed that for the Medical Preliminary Examination the papers set in Latin, Greek, and Mathematics shall be the same as those set on the lower standard in these subjects in the Arts and Science Preliminary Examination.¹

In English, no set books shall be prescribed, nor shall a general knowledge of the life and works of the greater authors be expected of candidates, but one or two questions may be set, giving an opportunity to candidates to show a knowledge of famous literary works. The historical questions shall not be confined to any one period, but shall cover the whole of British History, and shall be set in such a way as to give an opportunity to candidates who have confined their studies to a single period to show their knowledge. A single three hours' paper shall be set, containing an Essay, a Paraphrase, two questions on History, two on Geography, four on Grammar (including correction of sentences, parsing, analysis of sentences, and derivations), two of a literary and general kind. Eight answers shall be required. The Essay, the Paraphrase, one answer on History and one on Geography shall be compulsory.

One paper shall be set in French and one in German. The papers shall be of a lower standard than those set in these subjects in the Arts and Science Preliminary Examination. The time allowed for each of these papers shall be three hours. The paper in each subject shall comprise questions in Grammar, translation into English, a piece of English, and some short sentences in English of an idiomatic character, for translation.

It shall be in the option of any candidate for the Medical Preliminary to take the papers set on the higher standard for the Arts Preliminary in any of the subjects.

Candidates who, having taken English, Latin, Greek, or a Modern Language, on the higher standard, as prescribed by the Arts Ordinance for the Arts and Science Preliminary, have obtained a satisfactory percentage of marks, shall be held to have passed the Medical Preliminary in these subjects: and on the higher Mathematics paper, an intermediate pass in Mathematics is granted: Provided that all the required subjects are passed at no more than two examinations.

It shall be at the Board's discretion at all times in the case of any candidate for the Medical Preliminary who professes all his four subjects at one time, and who has obtained in all a number of marks equivalent to the sum of the marks required for a pass in each, to allow such candidate a pass in the whole examination, provided that in no single subject he has obtained less than half of the marks required for a pass, and that the pass-mark be reached in the English paper.

V. The Preliminary Examination shall be conducted in accordance with the provisions of Ordinance No. 13 (Regulations as to Examinations), and, subject to the provisions of the immediately succeeding section hereof, *a candidate shall be obliged to pass in all the required subjects at one or not more than two examinations; Provided that he*

¹ For details see p. 268.

may offer himself for re-examination as often as may be necessary to satisfy this condition.¹

VI. A degree in Arts or in Science (not being a degree *honoris causa tantum*) in any of the Universities of the United Kingdom, or in any Colonial or Foreign University specially recognised for the purpose by the University Court, shall exempt from the Preliminary Examination; and the Joint-Board of Examiners appointed under the provisions of Ordinance No. 13 (Regulations as to Examinations) shall have power to determine what examinations, other than those for the degrees hereinbefore mentioned, shall be accepted, either in whole or in part, in place of the Preliminary Examination.²

The Joint-Board have issued the following rules under the heading:—
Examinations accepted as exempting from the Preliminary Examination in Medicine: *Provided always that the regulations of the General Medical Council regarding the registration of students of Medicine be complied with:—*

1. In terms of the Medical Ordinances, “a degree in Arts or in Science (not being a degree *honoris causa tantum*) in any of the Universities of the United Kingdom, or in any Colonial or Foreign University, specially recognised for the purpose by the University Court, shall exempt from the Preliminary Examination.”

2. Any candidate who produces a certificate of having passed the Preliminary Examination in Arts or Science in any Scottish University, either at the University Examination or through the Leaving Certificate Examinations of the Scotch Education Department, or partly at the University Examination and partly through the Leaving Certificate Examinations, shall be held to have passed the Preliminary Examination for Medicine: *Provided that the examination has included the specified subjects of General Education as required under the Regulations of the General Medical Council, and by Section III. of this ordinance.*

3. A candidate who has passed the Arts and Science Preliminary Examination of the Joint-Board in any subject (Higher Standard where there is more than one) recognised for the Medical Preliminary Examination, shall be exempted from further examination in that subject in the aforesaid Preliminary Examination.

4. A candidate who has passed in the Honours or Higher Grade in any subject of the Leaving Certificate Examinations of the Scotch Education Department recognised for the Medical Preliminary Examination shall be exempted from further examination in that subject in the aforesaid Preliminary Examination.

The regulation that all the subjects of the examination shall be passed at one or not more than two examinations shall not be held to apply to the above cases, 2, 3, and 4. But candidates complying with Rules 2, 3, and 4 must obtain a University Certificate specifying the examinations passed by them which have been accepted as equivalents

¹ The words in *italics* are taken from Ordinance No. 156, Section I.

² Applications for exemption on the ground of having passed examinations not included in the following list, should be addressed to the Convener of the Board. As several Universities have to be consulted, a decision on a new case cannot be guaranteed in less time than from two to three weeks.

to the Preliminary, and must present said certificate to the Medical Registrar in order to registration.

Further, each such candidate when applying for said certificate must, if he has not entered for any part of the Preliminary, produce a Matriculation Card from some one of the Scottish Universities.

5. Passes in the lower Grade of the Leaving Certificate Examinations of the Scotch Education Department will not be accepted as exempting from the Medical Preliminary Examination unless the examinations in all the requisite subjects have been taken and passed at one or not more than two examinations.

6. The following English and Irish University Examinations will be accepted¹ (provided they include all the subjects required under the regulations of the General Medical Council, and prescribed by Section III. of this ordinance), viz.:—

OXFORD Responsions, or Moderations—provided the candidate pass the examination of the Joint-Board in English.

CAMBRIDGE Previous Examination—provided that candidates who have passed it prior to Michaelmas, 1896, shall pass the examination of the Joint-Board in English. If passed after Michaelmas, 1896, the Previous Examination will be accepted as exempting *in toto*.

OXFORD AND CAMBRIDGE SCHOOLS EXAMINATION BOARD.—The Passes in Latin, Greek, and Mathematics specified on p. 212 as exempting from the Lower Standard in Arts and Science will exempt also for the Medical Preliminary in these subjects. The Pass in French or German for the Lower Certificate or for the 'Leaving Certificate' will be accepted for a Pass in the Medical Preliminary in French or German. For English, the Board will accept (1) The 'Leaving Certificate' in English, with History or Geography; (2) The Lower Certificate in English, History, and Geography.

OXFORD Senior Local Examination will be accepted *pro tanto*, in subjects other than English; in English, if only a pass is offered, the three divisions, Essay, Grammar, and Literature will be expected, or equivalents thereto.

OXFORD Higher Local Examination will be accepted *pro tanto*.

CAMBRIDGE Senior Local Examinations will be accepted *pro tanto*.

CAMBRIDGE Higher Local Examinations will be accepted *pro tanto*.

LONDON UNIVERSITY Matriculation Examination.

DUBLIN, TRINITY COLLEGE.—Public Entrance Examination.

ROYAL UNIVERSITY OF IRELAND.—First Arts Examination.

UNIVERSITIES OF MANCHESTER, LIVERPOOL, LEEDS, AND SHEFFIELD.—Joint Matriculation Examination (the whole examination must be passed, as required for admission to the Faculties of these Universities).

By *pro tanto* is here meant that a certificate of having passed in the examination referred to, in any subject required for the Medical Preliminary Examination, shall, as regards that subject, exempt from further examination in the said Preliminary Examination, pro-

¹ The italicised words in Section V., pages 268, 269, shall be held to apply to the acceptance of these Examinations.

vided that all the required subjects shall be passed at one or not more than two examinations.

7. The examinations of the following Indian, Colonial, and Foreign Universities and Colleges will be accepted¹ (provided the examinations include all the subjects required by the General Medical Council and prescribed by the Medical Ordinances of the Scottish Universities Commissioners, see p. 267, Section III.), viz.:—

UNIVERSITIES OF INDIA (Calcutta, Madras, Bombay, Allahabad, Punjab).—Intermediate (First Arts) Examination. THE CAPE OF GOOD HOPE.—Matriculation Examination. TASMANIA.—Matriculation Examination. NEW ZEALAND.—Medical Preliminary Examination. MELBOURNE.—Matriculation Examination. SYDNEY.—Matriculation Examination. ADELAIDE.—Matriculation Examination, or its substitute, the Senior Public Examination. TORONTO.—Senior or Junior Matriculation Examination. WINNIPEG.—Preliminary Examination in Arts. HALIFAX, NOVA SCOTIA.—Matriculation Examination. FREDERICTON, NEW BRUNSWICK.—Matriculation Examination. MANITOBA.—Previous Examination.

THE PROVINCIAL EDUCATION DEPARTMENT OF ONTARIO.—Departmental Pass Arts Matriculation Examination.

TRINITY UNIVERSITY, TORONTO.—Matriculation Examination.

QUEEN'S COLLEGE AND UNIVERSITY, KINGSTON.—Matriculation Examination.

M'GILL UNIVERSITY.—Matriculation Examination.

KING'S COLLEGE, WINDSOR, NOVA SCOTIA.—Responsions.

DALHOUSIE COLLEGE, HALIFAX.—Matriculation Examination.

MOUNT ALLISON COLLEGE, SACKVILLE, NEW BRUNSWICK.—Matriculation Examination.

VICTORIA COLLEGE, UPPER CANADA.—Matriculation Examination.

THE WESTERN UNIVERSITY OF ONTARIO.—Matriculation Examination.

CODRINGTON COLLEGE (BARBADOS).—English Certificate for Students of two years' standing, and Latin Certificate, or "Testamur."

TRANSVAAL TECHNICAL INSTITUTE.—Matriculation Examination (if passed as a whole, as required for admission to the Institute).

CONTINENTAL COUNTRIES.—German Abiturienten-Examen, and corresponding Entrance Examinations to the Universities of other countries.

[Students would do well to ascertain at the Matriculation Office whether their Preliminary Examination is complete before beginning their medical studies.]

PROFESSIONAL EDUCATION.²

VII. Candidates shall be admitted to the Degree of Bachelor of Medicine and Bachelor of Surgery only after they have fulfilled the following conditions:—

1. The candidate must have been engaged in medical study for at least five years.

¹ See note on p. 270.

² For Order of Study recommended, see p. 101.

2. In each of the first four years the candidate must have attended at least two courses of instruction, in one or more of the subjects of study specified in Sub-section 4 hereof—each course extending over a session of not less than five months, either continuous or divided into two terms; or, alternatively, one such course, along with two courses, each extending over a session of not less than two and a half months.
3. During the fifth or final year the candidate shall be engaged in clinical study for at least nine months at one or more of such public hospitals or dispensaries, British or Foreign, as may be recognised for the purpose by the University Court.
4. The candidate must, during his curriculum, have attended a course or courses of instruction in each of the following subjects of study, including such examinations as may be prescribed in the various classes, viz. :—

1. ANATOMY,	{ During a course of not less than five months.
2. PRACTICAL ANATOMY,	{ During two courses of not less than five months each.
3. CHEMISTRY,	{
4. MATERIA MEDICA and THERAPEUTICS,	
5. PHYSIOLOGY OF INSTITUTES OF MEDICINE,	
6. PRACTICE OF MEDICINE,	
7. SURGERY,	
8. MIDWIFERY and the DISEASES peculiar to WOMEN and INFANTS. Two courses of Midwifery, of three months each, provided different departments of Obstetric Medicine be taught in each of the courses, shall be reckoned equivalent to a course of not less than five months,	{ During courses of not less than five months.
9. PATHOLOGY,	{
10. PRACTICAL CHEMISTRY,	
11. PHYSICS (including the DYNAMICS OF SOLIDS, LIQUIDS, and GASES, and the RUDIMENTS OF SOUND, HEAT, LIGHT, and ELECTRICITY),	
12. ELEMENTARY BOTANY,	
13. ELEMENTARY ZOOLOGY,	
14. PRACTICAL PHYSIOLOGY,	
15. PRACTICAL PATHOLOGY,	
16. MEDICAL JURISPRUDENCE and PUBLIC HEALTH,	{ During courses of not less than two and a half months.

Provided always, in so far as regards the University of Glasgow, that—

(a) It shall be the duty of the Senatus to determine from time to time [after receiving through the Faculty of Medicine the opinion of the Board of Studies] the number of meetings of which such courses shall consist, and in what cases two half courses shall be deemed equivalent to a full course; and to report the determination to the University Court for its approval.¹

(b) It shall be the duty of the Professors and Lecturers to submit to the Senatus [after 1st October, 1894, the Board of Studies] annually at the end of the winter session a scheme specifying what propor-

¹The Universities Commission, on 18th November, 1893, ordained that for the better carrying out of the purposes of these provisos the Senate should institute a Board or Boards of Studies in the Faculty of Medicine. See Section I., Ordinance No. 42, which received the approval of Her Majesty in Council on 28th May, 1894. The provisions of this supplementary ordinance have, in the text, been combined with the provisions of the original ordinance, by means of square brackets.

tion of the courses shall be devoted to lectures, practical demonstrations, examinations, and tutorial work respectively. [The Board of Studies shall transmit the schemes to the Faculty of Medicine, who shall submit them to the Senate with such observations as they may think fit to make thereon.] The Senatus shall transmit such schemes, with such observations as it may think fit to make thereon, to the University Court for its approval.¹

(c) The University Court shall not grant or continue recognition to any institutions or teachers unless it shall be satisfied that their courses of instruction are equivalent to the courses sanctioned in the Universities of Scotland.

5. The candidate must have attended for at least three years the Medical and Surgical Practice of a General Hospital at Glasgow or elsewhere, which accommodates not fewer than eighty patients, and possesses a distinct staff of physicians and surgeons, and is recognised for the purpose by the University Court.²
6. The candidate must have attended Clinical Surgery during a course or courses extending over not less than nine months. These courses may be conducted by the Professor of Clinical Surgery, or by Professors or Lecturers appointed for the purpose by the University Court, or by the ordinary surgeons of a general hospital defined and recognised as hereinbefore provided, and shall consist of regular instruction at the bedside, along with Clinical Lectures.
7. The candidate must have attended Clinical Medicine during a course or courses extending over not less than nine months. These courses may be conducted by the Professor of Clinical Medicine, or by Professors or Lecturers appointed for the purpose by the University Court, or by the ordinary physicians of a general hospital defined and recognised as hereinbefore provided, and shall consist of regular instruction at the bedside, along with Clinical Lectures.
8. The candidate must have attended a course of instruction in Mental Diseases, of such duration, and so apportioned between lectures, demonstrations, and clinical instruction, as the Senatus, with the approval of the University Court, may from time to time determine.
Under this sub-section the Senate, with the approval of the University Court, has determined that each candidate for the Degree of M.B. and Ch.B. shall be required to attend a course of instruction in Mental Diseases, given by the University Lecturer or by a recognised teacher, consisting of not less than eighteen meetings. Six of these may be class-room lectures, and the others shall be demonstrations in the wards of an asylum for the insane.
9. The candidate must have attended a course of twenty-five meetings on Practical Pharmacy in a University or recognised School of Medicine, or have dispensed drugs for a period of three months in an hospital or dispensary, or in an establishment recognised by

¹ See note on page 272.

² On 7th October, 1892, the University Court recognised every General Hospital in the United Kingdom which accommodates not fewer than eighty patients, and possesses a distinct staff of physicians and surgeons.

the Pharmaceutical Society, *i.e.* in the establishment of any chemist and druggist or pharmaceutical chemist of Great Britain, or any pharmaceutical chemist of Ireland, who is registered in the books of the Pharmaceutical Society of Great Britain or of the Pharmaceutical Society of Ireland respectively.¹

10. The candidate must have attended, for at least six months, by apprenticeship or otherwise, the out-practice of an hospital, or the practice of a dispensary, or of a physician or surgeon, or of a member of the London or Dublin Society of Apothecaries. He must have acted as clerk in the medical and dresser in the surgical wards of a public hospital; and must also have availed himself, to such an extent as may be required by the Senatus, with the approval of the University Court, of opportunities of studying at an hospital or dispensary *Post-mortem* Examinations, Fevers, Diseases of Children, Ophthalmology, or such other special departments as may from time to time be determined.

Under this sub-section the Senate, with the approval of the University Court, has determined as follows:—

A. Each candidate for M.B. and Ch.B. shall be required to attend—

1. Demonstrations in the *post-mortem* room of a recognised hospital, with practical instruction in making *post-mortem* examinations. The student must have attended during his curriculum at least twenty examinations.
2. A course of clinical instruction in Fevers, consisting of at least ten meetings in a hospital for infectious diseases containing not less than fifty beds.
3. A practical course of instruction in Ophthalmology of not less than twenty meetings. Six of these may be classroom lectures, and the others shall be for clinical instruction in the wards of a recognised hospital,² or in the wards of a hospital and in a dispensary both recognised for the purpose. The course shall include sufficient practical instruction in the methods of examining the eye.

B. Each candidate is also recommended to attend the following:—(a) Diseases of Children, (b) Diseases of the Ear, (c) Diseases of the Throat and Nose, and (d) Diseases of the Skin, in short practical courses of ten meetings.

N.B.—This is not to be understood as preventing a teacher in any speciality giving a fuller course to such students as may desire to follow out more fully any particular branch.

11. The candidate must have attended, under the superintendence of a registered medical practitioner, twelve cases of labour, or such additional number as the Senatus, with the sanction of the University Court, may from time to time determine; or have attended

¹ The explanatory words in italics are taken from Ordinance No. 54, Section II., issued by the Universities Commission on 18th July, 1894, which came into operation on 11th May, 1895, having been on that date approved by Her Majesty in Council.

² This means a hospital recognised *ad hoc*, after application to the University Court in each case.

for three months the practice of a lying-in hospital, or of the maternity department of a general hospital or other public charitable institution, and have conducted personally six, or such an additional number of cases of labour as the Senatus, with the approval of the University Court, may from time to time determine.

12. The candidate must have been properly instructed in Vaccination at a Public Vaccination Station, by a Public Vaccinator, authorised by the proper Government Authority to grant Certificates of Proficiency in Vaccination.¹
13. No candidate for a degree shall be deemed to have attended a class as part of the curriculum necessary for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

VIII. With respect to the places and institutions at which the studies of the candidate may be prosecuted, the following regulations shall have effect:

1. Two of the five years of medical study must be spent in the University of Glasgow, each year of study including always the attendances specified in Section VII., sub-section 2.
2. The remaining three years may be spent in any University of the United Kingdom, or in any Indian, Colonial, or Foreign University recognised for the purpose by the University Court, or in such medical schools or under such teachers as may be recognised for the purpose by the University Court, each year of study during the first four years including always the attendances specified in Section VII., sub-section 2.
3. Of the subjects of study specified in Section VII., sub-section 4, not less than eight must be taken in the University of Glasgow, or (subject always to the provisions as to attendance contained in the immediately preceding sub-sections) in some other University of the United Kingdom, or in some Foreign or Colonial University entitled to confer the Degree of Doctor of Medicine recognised for the purpose by the University Court, or in a College incorporated with, or affiliated to a University entitled to confer the Degree of Doctor of Medicine recognised for the purpose by the University Court: Provided always that where in any of said subjects of study two or more courses are required, the taking of one of those courses shall constitute a taking of the subject for the purpose of this sub-section.
4. The remainder of such subjects of study may (subject always as aforesaid) be taken in such medical schools or under such teachers as may be recognised for the purpose by the University Court.
5. All candidates, not Matriculated Students of the University, availing themselves of the permission to attend the Lectures of Extra-Academical Teachers in Glasgow, must, at the commencement of each year of such attendance, enrol their names in a

¹The recognised Vaccine Departments in Glasgow are—Western Infirmary and Royal Infirmary.

book to be kept in the University for that purpose, paying a fee of the same amount as the Matriculation Fee paid by students of the University, and having, in respect of such payment, a right to the use of the Library of the University.

6. The fee for attendance, for purposes of graduation, on the courses of instruction of recognised Extra-Academical Teachers in Glasgow shall be not less than the amount exigible for the corresponding courses in the University.
7. The University Court shall not recognise as qualifying for examination in any of the subjects specified in Section VII., sub-section 4, the class of any teacher who is at the time a teacher of more than one of the said subjects, except in those cases where Professors in the University are at liberty to teach two subjects: Provided always that a Professor or other teacher in any endowed public College or institution, who by the terms of his appointment is required to teach more than one subject of medical study therein, may be recognised under sub-section 2 of this section, as a teacher of any one of the subjects which he teaches.
8. A teacher, attendance on whose course of instruction shall, before the date of the approval of this ordinance by her Majesty in Council, have been recognised for the purposes of graduation in the University, shall not require to obtain a new recognition from the University Court; and attendance on the course of instruction of every such teacher may continue to be recognised as heretofore.
9. It shall be in the power of the University Court, if it shall see cause, at any time to withdraw or suspend any recognition which it may have granted.

IX. In the University of Glasgow it shall be the duty of the Professors of the subjects specified in Section VII., sub-section 4 hereof (except Practical Anatomy and such other subjects as the Senatus, with the approval of the University Court, may from time to time determine), so to conduct the courses that Students may receive instruction sufficient for graduation in any one of the said subjects by attendance on one course of five or six months, or of two and a half or three months, as the case may be.¹

X. If any candidate shall, before presenting himself for his Preliminary Examination, have attended in any University of the United Kingdom, or in any University or Institution specially approved, or

¹ Doubt being entertained as to the construction of this Section, the question was submitted to the Universities Commissioners, and evoked from them the following deliverance:—

It is not intended to require of the Professor a complete course of instruction by lectures during each session, or to limit the examinations for degrees to subjects which shall be discussed in the lectures of the Professor at the time that the student attended the course. The word "instruction," as used in this Section, is to be held to include lectures upon such parts of the subject as the Professor may be able to overtake, supplemented by directions as to the use of text-books or other sources of information for the remainder of the subject: and it is also intended that the examinations may be taken over the whole field, even when the Professor has not been able to include it all in his course of lectures.

under any Teacher specially recognised for the purpose by the University Court, a course or courses of instruction in Physics, Chemistry, Botany, or Zoology, equivalent in the judgment of the Senatus to the qualifying course in the same subject in the University of Glasgow, such attendance shall (notwithstanding anything hereinbefore ordained) be held as entitling him to be examined in these subjects; and if the candidate shall have attended such course or courses in each of the said subjects, he shall be held to have completed his first year of Medical Study: Provided always that the evidence of such attendance at such equivalent course or courses shall be presented to the Senatus at the time when the candidate presents himself for his Preliminary Examination; and the Senatus shall, if satisfied, grant a certificate to that effect: *Provided also that the provisions of this section shall not have effect except where the University Court shall allow their application after a report by the Senatus Academicus, setting forth special grounds therefor in the case of any candidate named in the report.*¹

PROFESSIONAL EXAMINATION FOR THE DEGREES OF BACHELOR OF MEDICINE AND BACHELOR OF SURGERY.²

XI. Each candidate shall be examined both in writing and orally, and also clinically where the nature of the subject admits, in the following divisions, viz.:—*First*, in Botany, Zoology, Physics, and Chemistry; *Second*, in Anatomy, Physiology, and Materia Medica and Therapeutics; *Third*, in Pathology, and Medical Jurisprudence and Public Health; *Fourth*, in Surgery and Clinical Surgery, Practice of Medicine and Clinical Medicine, and Midwifery.

In subjects which admit of practical instruction, the examination shall be such as to test the practical acquirements of the candidate.

Provided always that if a candidate have obtained in a University of the United Kingdom, or other University specially recognised for the purpose by the University Court, a degree in Science or in Arts, granted in either case after a course of study and an examination in Botany, Zoology, Physics, and Chemistry, he shall be held to have passed his examinations in the said subjects.

Provided also that if a candidate have completed in a University of the United Kingdom a course of study and passed an examination in Botany, Zoology, Physics, or Chemistry qualifying for a degree in Science or in Arts, he shall be held to have passed the examinations in such subject or subjects.

If a candidate have obtained a degree in Science or in Arts in any University other than a University of the United Kingdom, granted in either case after a course of study and an examination in Botany, Zoology, Physics, or Chemistry, it shall be in the power of the University Court to exempt such candidate from the examinations in such subject or subjects:

¹The proviso in italics is taken from Ordinance No. 54, Section V., issued by the Universities Commission on 18th July, 1894, which came into operation on 11th May, 1895, having been on that date approved by Her Majesty in Council.

²For Table of Fees and Dates of Examinations, see page 284.

*Provided that the course of study and the standard of examination in each case are satisfactory in the judgment of the Senatus Academicus.*¹

XII. Candidates who profess themselves ready to submit to an examination in the subjects comprised in the first division, viz.:—Botany, Zoology, Physics, and Chemistry, may be admitted to examination in all or any two of these subjects at any examination held after they have attended a full course in each of the subjects professed.

XIII. Candidates who have passed their examination in the subjects comprised in the first division may be admitted to examination in the second division at the end of the third winter session.

Provided that candidates who so desire may postpone their examination in *Materia Medica* and *Therapeutics* until the close of the summer session following.

XIV. Candidates who have passed their examinations in the subjects comprised in the first and second divisions may be admitted to examination in the third division at the end of the fourth winter session.

Provided that candidates who so desire may postpone their examination in *Medical Jurisprudence* and *Public Health* until the close of the summer session following.

XV. Candidates who have passed their examinations in the subjects comprised in the first, second, and third divisions may be admitted to examination in the fourth or final division, when they have completed the fifth year of study.

XVI. If any candidate at these examinations be found unqualified in one or more subjects he shall not again be admitted to examination unless he has pursued his medical studies for such time, and subject to such conditions, as the Faculty of Medicine may prescribe.

Under this section the Faculty of Medicine, with the sanction of the Senate, has laid down the following rule: No student, who in the Final Professional Examination has been found unqualified in any subject, shall be re-admitted to examination without furnishing evidence of having further studied that subject for such a period as the Examiners may fix.

XVII. If any candidate at these examinations be found to have passed in one or more subjects with sufficient merit, he shall not be liable to re-examination in such subject or subjects, although he may have been found unqualified in a subject or subjects comprised in the same division as hereinbefore specified.

XVIII. Every candidate must deliver, on or before such day as the Senatus may from time to time determine, to the Dean of the Faculty of Medicine, a declaration, in his own handwriting, that he has completed his twenty-first year, or that he will have completed it on or before the day of graduation, and that he will not be, on the day of graduation, under articles of apprenticeship to any surgeon or other master.

¹The words in italics are taken from Ordinance No. 54, Sections III. and IV., issued by the Universities Commission on 18th July, 1894, which came into operation on 11th May, 1895, having been on that date approved by Her Majesty in Council.

XIX. After the candidate has satisfied the Examiners, the Dean of the Faculty of Medicine shall lay the proceedings before the Senatus, by whose authority the candidate shall be admitted, on such day as the Senatus may from time to time appoint, to the Degrees of Bachelor of Medicine and Bachelor of Surgery, on payment of the required fees.¹

XX. Candidates for graduation shall produce evidence of their having conformed to the regulations which were in force at the time they commenced their medical studies: Provided that any student who began his medical studies before 1st January, 1892, shall be entitled to graduate under the system in force before or after that date, according as he shall comply with the regulations in force in the University before² or after that date.

PROFESSIONAL EXAMINATION FOR THE DEGREE OF DOCTOR OF MEDICINE.

- XXI. 1. Subject to the conditions hereinafter specified, the Degree of Doctor of Medicine shall be conferred on any candidate who has obtained the Degrees of Bachelor of Medicine and Bachelor of Surgery of the University of Glasgow, and is of the age of twenty-four years or upwards, and has produced a certificate of having been engaged subsequently to having received the Degrees of Bachelor of Medicine and Bachelor of Surgery for at least one year in attendance in the Medical Wards of an Hospital, or in scientific work bearing directly on his profession, such as is conducted in the Research Laboratories of the University, or in the Military or Naval Medical Services, or for at least two years in Practice other than Practice restricted to Surgery.
2. Each candidate for the Degree of Doctor of Medicine shall be required to pass an examination in Clinical Medicine and in such of its special departments as the Senatus, with the approval of the University Court, by Regulations framed from time to time, shall determine; and he may present himself for examination in Clinical Medicine at any period of examination subsequent to one year after he has received the Degrees of Bachelor of Medicine and Bachelor of Surgery.

Under this sub-section the following regulations have been framed by the Senatus, and approved by the University Court:—The Examination in Clinical Medicine for the Degree of Doctor of Medicine shall for each candidate consist of a written Report and Commentary, with any oral questions that may be considered desirable, upon at least three Medical cases. In the selection of the cases, special regard shall be given to the opportunities they afford for testing the candidate, not only in the ordinary methods of clinical investigation, but also in the more advanced methods requiring practical knowledge in the applications of the ophthalmoscope and laryngoscope, in the chemical and microscopical examination of excreta, the quantitative determination and

¹ For Table of Fees and Dates of Examination, see page 284.

² These regulations may be found at pp. 188–192 of the *University Calendar* for session 1895–96, and in the *Calendars* for preceding sessions.

microscopic characters of the chief constituents of blood possessing clinical importance, the recording by instruments of the condition of the circulation, the applications of electricity, etc.

Provided always that one of the cases on which a candidate is examined may, if the candidate on entering his name for the Examination declare a wish to that effect, be from one of the following departments, namely, Diseases of Women, Diseases of Children, Mental Diseases, Zymotic Diseases, Diseases of the Eye, Diseases of the Throat, Diseases of the Ear, Diseases of the Skin. Should the candidate specialise in one of these departments he will be expected to show high proficiency in it.

The examinations for M.D. will be held in the month of October, each Session. Candidates must enter their names and lodge their Theses with the Assistant Clerk (Matriculation Office) on or before 1st October.

3. Each candidate for the Degree of Doctor of Medicine shall submit for the approval of the Faculty of Medicine a Thesis on any branch of knowledge comprised in the second, third, or fourth examinations for the Degrees of Bachelor of Medicine and Bachelor of Surgery, which he may have made a subject of study after having received those Degrees, excepting subjects which are exclusively Surgical; and the Thesis, accompanied by a declaration signed by the candidate, that the work has been done and the Thesis composed by himself,¹ shall be lodged with the Dean of the Faculty of Medicine (at the Matriculation Office) on or before a date to be fixed by the Senatus (1st October).
4. A Bachelor of Medicine and Bachelor of Surgery, who produces to the Senatus satisfactory evidence of his intention of entering within twelve months after obtaining such degrees on the practice of his profession in a British Possession or Colony, or in a foreign Country, may, under Regulations to be framed by the Senatus, be admitted to the examination in Clinical Medicine at any period of examination after he has received such degrees; but the Degree of Doctor of Medicine shall not be conferred on him unless he shall produce a certificate that, subsequently to having received the Degrees of Bachelor of Medicine and Bachelor of Surgery, he has been engaged for at least one year in attendance in the Medical Wards of an Hospital, or in scientific work bearing directly on his profession, such as is conducted in the Research Laboratories of the University, or in the Naval or Military Medical Services, or for at least two years in Practice which has not been exclusively surgical, and unless his Thesis in the judgment of the Faculty of Medicine is of exceptional merit.

Bachelors of Medicine and Masters of Surgery of the University of Glasgow, who have graduated under the regulations in force before the fifth day of August, 1892, may proceed to the Degree of

¹ The Faculty of Medicine give notice that no Thesis will be approved unless it gives evidence of original observation, or, if it deal with the researches of others, gives a full statement of the literature of the question, with accurate references and critical investigation of the views or facts cited: mere compilations will in no case be accepted.

*Doctor of Medicine under the provisions of this section, in the same manner as if they held the Degree of Bachelor of Surgery.*¹

PROFESSIONAL EXAMINATION FOR DEGREE OF MASTER OF SURGERY.

- XXII. 1. Subject to the conditions hereinafter specified the Degree of Master of Surgery shall be conferred on any candidate who has obtained the Degrees of Bachelor of Medicine and Bachelor of Surgery of the University of Glasgow, and is of the age of twenty-four years or upwards, and has produced a certificate of having been engaged, subsequently to his having received the Degrees of Bachelor of Medicine and Bachelor of Surgery, for at least one year in attendance in the Surgical Wards of an Hospital, or in scientific work bearing directly on his profession, such as is conducted in the Research Laboratories of the University, or in the Military or Naval Medical Services, or for at least two years in practice other than practice restricted to Medicine.
2. Each candidate for the Degree of Master of Surgery shall be required to pass an examination in the following subjects:—Surgical Anatomy, Operations upon the dead body, and Clinical Surgery, and in such of the special departments of Clinical Surgery as the Senatus, with the approval of the University Court, by Regulations framed from time to time, may determine; and he may present himself for examination in these subjects at any period of examination subsequent to one year after he has received the Degrees of Bachelor of Medicine and Bachelor of Surgery.

Under this sub-section the following regulations have been framed by the Senatus, and approved by the University Court:—The Examination in Clinical Surgery for the Degree of Master of Surgery shall for each candidate consist of a written Report and Commentary, with any oral questions that may be considered desirable on at least three Surgical cases.

Provided that one of the three Surgical cases on which a candidate is examined shall, if the candidate on entering his name for the Examination declare a wish to that effect, be from one of the following departments, namely, Surgical Diseases of Women, Diseases of the Throat, Diseases of the Eye, Diseases of the Ear. Should the candidate specialise in one of these departments he will be expected to show high proficiency in it.

3. Each candidate for the Degree of Master of Surgery shall submit for the approval of the Faculty of Medicine a Thesis on any branch of knowledge comprised in the second, third, or fourth Examinations for the Degrees of Bachelor of Medicine and Bachelor of Surgery, which he may have made a subject of study after having received those Degrees, excepting subjects that are exclusively medical; and the Thesis, accompanied by a declaration signed by the candidate that the work has been done and the

¹ Taken from Ordinance No. 54, Section VI., which was issued by the Universities Commissioners on 18th July, 1894, and came into operation on 11th May, 1895, having on that date been approved by Her Majesty in Council.

Thesis composed by himself,¹ shall be lodged with the Dean of the Faculty of Medicine on or before a date to be fixed by the Senatus.

4. A Bachelor of Medicine and Bachelor of Surgery who produces to the Senatus satisfactory evidence of his intention of entering, within twelve months after obtaining such degrees, on the practice of his profession in a British Possession or Colony, or in a foreign Country, may, under Regulations to be framed by the Senatus, be admitted to examination in the subjects specified in Sub-section 2 of this section, at any period of examination after he has received such degrees; but the Degree of Master of Surgery shall not be conferred on him unless he shall produce a certificate that, subsequently to having received the Degrees of Bachelor of Medicine and Bachelor of Surgery, he has been engaged for at least one year in attendance in the Surgical Wards of an Hospital, or in scientific work bearing directly on his profession, such as is conducted in the Research Laboratories of the University, or in the Naval or Military Medical Services, or for at least two years in Practice which has not been exclusively medical, and unless his Thesis, in the judgment of the Faculty of Medicine, is of exceptional merit.

FEES.

XXIII. The fee to be paid for the Degrees of Bachelor of Medicine and Bachelor of Surgery shall be twenty-two guineas, and the proportion of this sum to be paid by a candidate at each division of the examination shall be regulated from time to time by the University Court. The fee to be paid for the Degree of Doctor of Medicine shall be ten guineas, exclusive of any stamp duty which for the time may be exigible. The fee to be paid for the Degree of Master of Surgery shall be ten guineas.

EXAMINERS.

XXIV. The Examiners for graduation in Medicine in the University of Glasgow shall be the Professors in that University, together with such Lecturers in the University and such additional Examiners, to be appointed by the University Court, as the University Court shall deem necessary: Provided that the Court shall make such provisions as will ensure that every candidate shall be examined in each subject by at least two Examiners, of whom one shall not be a Professor or Lecturer in the University. The examinations shall be conducted in writing and orally and also clinically, when the nature of the subject admits, under regulations framed by the Senatus subject to the approval of the University Court.

DISTINCTIONS ATTAINABLE BY STUDENTS AND GRADUATES OF MEDICINE.

Candidates who have shown special merit in any subject or subjects at any of the Professional Examinations will be announced as having passed in such subject or subjects "with distinction."

Candidates who have shown special merit as indicated by the aggre-

¹ See footnote on page 280.

gate results of the four Professional Examinations will be announced, at the time of Graduation, as having obtained Commendation or Honours, according to the degree of excellence.

In connection with the Higher Degrees in Medicine and Surgery two grades of distinction are also awarded, viz., Commendation and Honours. The Bellahouston Trustees have put it in the power of the University to award three Gold Medals yearly to those who, having gained Honours, are pronounced by the Senate on the Report of the Faculty of Medicine worthy of this highest distinction for the excellence of their Theses. Graduates in Medicine or Surgery to whom Honours are awarded for their Theses are requested to publish these Theses in Journals or otherwise, and to supply copies to the University for exchange with other Universities.

GRADUATION.

The terms for conferring Medical and Surgical Degrees in session 1906-7 are 8th November, 1906; 7th February, 1907; 23rd April, 1907; and 23rd July, 1907.

Candidates proceeding to graduation, if not already Members of the General Council of the University, are required by the Act, 44 and 45 Vict., ch. 40, to pay to the Registrar of the General Council the Registration Fee, and furnish to him the particulars required for their enrolment in the General Council. This should in all cases be done at least two clear days before the day of graduation.

In accordance with the Promissory Oaths Act, 1868, a Declaration in the following English form is now substituted for the Latin Oath,¹ formerly required to be taken and subscribed by every candidate on graduation:—

I make this solemn declaration in virtue of the Provisions of the Promissory Oaths Act, 1868, substituting a Declaration for Oaths in certain cases.

I do solemnly and sincerely declare, that, as a Graduate in Medicine of the University of Glasgow, I will exercise the several parts of my profession, to the best of my knowledge and abilities, for the good, safety, and welfare of all persons committing themselves, or committed to my care and direction; and that I will not knowingly or intentionally do anything or administer anything to them to their hurt or prejudice, for any consideration, or from any motive whatever. And I further declare, that I will keep silence as to anything I have seen or heard while visiting the sick which it would be improper to divulge.

REGISTRATION OF MEDICAL PRACTITIONERS.

Graduates should register as soon as possible with the Branch Registrar for Scotland, at 54 George Square, Edinburgh. Fee £5 1s. Additional qualifications, £1 each. Forms of application may be had from the Assistant-Clerk (Matriculation Office).

¹ *The Oath was in these words:*—Testor Deum omnipotentem me hoc Iusjurandum pro virili servaturum; Victus rationem aegris commodam et salutarem praescripturum; nullius intercessione nec sponte noxium pharmacum cuiquam propinaturum; sed sancte et caste vitam artemque meam instituturum; In quascunque domos intravero ad aegrotantium duntaxat salutem ingressurum et ab omni injuria inferenda procul futurum; Quaecunque inter curandum videro audiverove siquidem ea efferre non expediat silentio suppressurum.

TABLE OF EXAMINATIONS FOR DEGREES IN MEDICINE TO BE HELD DURING SESSION 1906-7.

Fees.	Names to be given in and Fees paid to Assistant-Clerk 1 (Matriculation Office). Date. ²	Dates of Written Examinations and Hours at which the different Papers will be set. Printed Schedules with detailed instructions for filling up may be obtained from the Assistant-Clerk 1 (Matriculation Office). The Professional Oral Examinations follow immediately after the Written.				
		1906.	1906.	1906.	1906.	1906.
Under the Old Regulations the Fee for each Professional Examination is £5 5s.; under the New, the Fees are—First, £6 5s.; Second, £7 0s.; Third, £3 5s.; Fourth, £3 5s.	13th September, 1906,	Mon., 1st	Oct., - Zoology - - - - -	- 9-11 a.m.	Chemistry - - - - -	- 2-4 p.m.
		Mon., 1st	" - Materia Medica - - - - -	- 9-11 a.m.	Physics - - - - -	- 2-4 p.m.
		Tues., 2nd	" - Botany - - - - -	- 9-11 a.m.	Physiology - - - - -	- 2-4 p.m.
		Tues., 2nd	" - Anatomy - - - - -	9-10.30 a.m.	Pathology - - - - -	- 2-4 p.m.
	11th March, 1907,	Tues., 2nd	" - - - - -	- - - - -	Public Health - - - - -	12-2 p.m.
		Wed., 3rd	" - Medical Jurisprudence - - - - -	- 9-11 a.m.		
		Mon., 1st	April, Zoology - - - - -	- 9-11 a.m.	Chemistry - - - - -	- 2-4 p.m.
		Mon., 1st	" - Materia Medica - - - - -	- 9-11 a.m.	Physics - - - - -	- 2-4 p.m.
	30th May, 1907,	Tues., 2nd	" - Botany - - - - -	- 9-11 a.m.	Physiology - - - - -	- 2-4 p.m.
		Tues., 2nd	" - Anatomy - - - - -	9-10.30 a.m.	Pathology - - - - -	- 2-4 p.m.
		Tues., 2nd	" - - - - -	- - - - -	Public Health - - - - -	12-2 p.m.
		Wed., 3rd	" - Medical Jurisprudence - - - - -	- 9-11 a.m.		
		Thurs., 20th June,	- Practice of Medicine - - - - -	- 10-12 noon.	Surgery - - - - -	- 2-4 p.m.
		Fri., 21st	" - Midwifery - - - - -	- 10-12 noon.		
		Fri., 21st	" - (<i>Clinical Examinations begin</i>). - - - - -			

¹ For Women Students, Miss Galloway, Queen Margaret College.

² When names are not given in and fees are not paid on or before the stated dates, a late Entry Fee of Ten Shillings must be paid before the candidate can be enrolled for examination. A candidate is not held to be enrolled for examination until his name is entered, the fee paid, and all the necessary Certificates, etc., lodged. Every candidate must matriculate at the University for the session in which he enters for professional examination or for graduation.

5.—GRADUATION IN LAW.

Two Degrees in Law are conferred, after examination, by the University of Glasgow, viz., Bachelor of Laws (LL.B.) and Bachelor of Law (B.L.).

By regulation of the Faculty of Advocates, any one who has obtained the Degree of LL.B. from a Scottish University is held qualified in General Scholarship and Law with a view to admission to the Bar, without examination or other evidence of such qualification, except as stated on page 129.

By the Law Agents Act, 36 and 37 Vict., c. 63, the holder of a degree in Law or in Arts of a University in Great Britain or Ireland, granted after examination, is qualified to apply for admission as a Law Agent after an apprenticeship of three years, instead of five, as required in the ordinary case; and by Act of Sederunt of 20th July, 1878, any applicant who holds the Degree of LL.B. or of B.L. of any Scottish University is exempted from any examination in Law before the Examiners of Law Agents, excepting only on forms of Process, Civil and Criminal, and a similar provision is contained in the Act of Sederunt of 18th March, 1893. (See also page 130.)

Degree of LL.B.

The following are the provisions of Ordinance No. 39, General No. 11, which, having been approved by Her Majesty in Council of 28th May, 1894, applies to all students who, after 30th September, 1894,¹ began their course of study with a view to graduation in Law:—

I. No one shall be admitted to examination as a candidate for the Degree of Bachelor of Laws (LL.B.) unless he be a graduate in Arts of one of the Universities of the United Kingdom; or of any Foreign or Colonial University specially recognised for the purpose by the University Court.

II. The course of study in Law for the Degree of Bachelor of Laws shall include the following subjects:—

- (1) Jurisprudence, General or Comparative, during a course of not less than forty lectures.
- (2) The Law of Nations or Public International Law, during a course of not less than forty lectures.
- (3) Civil Law during a course of not less than eighty lectures.
- (4) Law of Scotland, or Law of England, during a course of not less than eighty lectures.
- (5) Constitutional Law and History, during a course of not less than eighty lectures.
- (6) Conveyancing, during a course of not less than eighty lectures; or Political Economy, or Mercantile Law, during a course of not less than eighty lectures.
- (7) Any two of the following subjects, namely:—International Private Law, Political Economy, Administrative Law, and Forensic Medicine; in each case during a course of not less than forty lectures.

Students who began their course previous to 1894 may qualify themselves for graduation in Law under the old regulations, which are given at pp. 227-229 in the *University Calendar* for 1900-1901 and in the *Calendars* for preceding sessions.

III. (1) The course of study necessary for the Degree of Bachelor of Laws shall extend over three academical years, one of which at least must be spent in the University in which the candidate intends to graduate, the other two may have been spent in any other University or School of Law specially recognised by the University Court.

(2) No candidate for a degree shall be deemed to have attended a class as part of the course of study necessary for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

IV. Candidates must undergo examination in the subjects prescribed in Section II. hereof; and they must pass at one examination in at least two of those subjects. Before presenting themselves in any subject the candidates must have attended the requisite course of instruction in such subject. Candidates who have passed an examination for another degree in any of the said prescribed subjects in the same University may be exempted from examination in such subject or subjects, provided that the Examiners are satisfied that the previous examination in such subject or subjects has been passed on a sufficiently high standard.

V. Every candidate for the Degree of Bachelor of Laws shall be examined both orally and in writing on each of the subjects in the course of study above prescribed in which he presents himself for examination.

VI. (1) Distinction may be awarded to candidates who have displayed exceptional merit in their examinations.

(2) For the Degree of Bachelor of Laws a diploma shall be given, setting forth the subjects in which the candidate has passed, and the distinction (if any) he has attained.

VII. The Examiners shall be the Professors of or Lecturers on the subjects included in the said examinations, and additional Examiners appointed by the University Court. The mode of conducting the examination shall be fixed from time to time by the Senatus Academicus.

VIII. Every student who at the time when this ordinance shall come into operation shall have completed a part of his course with a view to graduation as Bachelor of Laws in any Scottish University, under regulations hitherto in force in that University, and shall thereafter complete his course of study in conformity with such regulations, may become a candidate for the Degree of Bachelor of Laws without complying with the provisions of this ordinance.

IX. Ordinance numbered 75 of the Commissioners under the Universities (Scotland) Act, 1858, is hereby repealed, in so far as it is inconsistent with this ordinance.

X. This ordinance shall come into force at the beginning of the first academical year after the date on which it is approved by Her Majesty in Council. [Approved on 28th May, 1894.]

Degree of B.L.

The following are the provisions of Ordinance No. 40, General No. 12, which, having been approved by Her Majesty in Council on 28th May, 1894, applies to all students who, after 30th September, 1894, began their course of study with a view to graduation in Law.

I. No one shall be admitted to examination as a candidate for the Degree of Bachelor of Law (B.L.) unless he be a graduate in Arts of one

of the Universities of the United Kingdom, or of any Foreign or Colonial University specially recognised for the purpose by the University Court; or until he shall have passed—

A. The Preliminary Examination in the Faculty of Arts, or its equivalent, as specified in Ordinance No. 11 (General No. 6—Regulations for Degrees in Arts); and

B. An Examination in one of the Scottish Universities, to be conducted by the Examiner in Arts, in the following subjects, on the standard of examination for the Ordinary Degree of Master of Arts:—

(1) Logic and Psychology; or, in the option of the candidate, Moral Philosophy.

(2) Latin.

(3) One additional Arts subject, not being one of those which belong also to the Faculty of Law.

And he must have studied at least one of these subjects in a full course in a Scottish University, or an equivalent course in another University approved by the University Court.

II. The course of study in Law necessary for the Degree of Bachelor of Law shall include the following subjects:—

1. Civil Law, during a course of not less than eighty lectures;¹ or a half course in Civil Law where in any University a full course is not available: Provided that in the latter case, candidates who are not already graduates in Arts shall be required to take in addition a course in such subject in Arts as may be sanctioned by the Senatus Academicus, or a half course in one or other of the following branches of Law:—

(a) Jurisprudence, General or Comparative.

(b) The Law of Nations, or Public International Law.

(c) Constitutional Law and History.

(d) International Private Law.

(e) Mercantile Law.

(f) Administrative Law.

2. Law of Scotland, during a course of not less than eighty lectures.

3. Conveyancing, during a course of not less than eighty lectures.

4. Forensic Medicine, during a course of not less than forty meetings of the class; or, in the option of the candidate, a half course in one of the branches of Law specified in Sub-section 1 of this section¹ if not already taken.

III. (1) The course of study in Law necessary for the Degree of Bachelor of Law shall extend over two academical years.

(2) No candidate for a degree shall be deemed to have attended a class as part of the course of study necessary for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

(3) The candidate may prosecute his studies during the prescribed two years in one Scottish University, or in different Scottish Universities, or in a Scottish University and a University or School of Law specially recognised by the University Court; but one at least of these years must

¹ The remainder of this sub-section does not apply to the University of Glasgow, which provides a full course in Civil Law.

have been spent, and all the examinations in the subjects mentioned in the preceding section must have been passed at the University in which he intends to graduate.

IV. The candidate for the Degree of Bachelor of Law must undergo examination and pass in the four or more subjects selected by him; but he may present himself for examination in one subject or group of subjects at a time, provided that he has completed the course of study for such subject or group of subjects, and provided also that in that case a higher standard of proficiency shall be exacted.

V. Every candidate for the Degree of Bachelor of Law shall be examined, both orally and in writing, on each of the subjects in the course of study above prescribed, in which he presents himself for examination.

VI. (1) Distinction may be awarded to candidates who have displayed exceptional merit in their examinations.

(2) For the Degree of Bachelor of Law a diploma shall be given, setting forth the subjects in which the candidate has passed, and the distinction (if any) he has attained.

VII. The Examiners shall be the Professors of and Lecturers on the subjects included in the said examinations, and additional Examiners appointed by the University Court. The mode of conducting the examinations shall be fixed from time to time by the Senatus Academicus.

VIII. Every student who at the time when this ordinance shall come into operation shall have completed a part of his course with a view to graduation as a Bachelor of Law in any Scottish University under regulations hitherto in force in that University, and shall thereafter complete his course of study in conformity with such regulations, may become a candidate for the Degree of Bachelor of Law without complying with the provisions of this ordinance.

IX. Ordinance numbered 75 of the Commissioners under the Universities (Scotland) Act, 1858, is hereby repealed, in so far as it is inconsistent with this ordinance.

X. This ordinance shall come into force at the beginning of the first academical year after the date on which it is approved by Her Majesty in Council. [Approved on 28th May, 1894.]

SUBJECTS OF EXAMINATION.

The examinations for LL.B. and B.L. in session 1906-7 will embrace the following books and subjects, viz. :—

In Civil Law.—Institutes of Justinian (Ed. Moyle or Sandars) and the Class Lectures; also Dig., Lib. XVIII., Tit. I.—translated and annotated by Mackintosh—Roman Law of Sale.

In the Law of Scotland.—In addition to the Class Lectures, the books recommended are Bell's Principles of the Law of Scotland, and Erskine's Principles of the Law of Scotland. In Criminal Law, Macdonald's Criminal Law and Erskine's Principles. Recent editions of the works mentioned should be used.

In Conveyancing.—In addition to the Class Lectures, the books recommended are Duff's Feudal Rights, with Supplement; Lectures on Conveyancing, by Menzies; Lectures on Conveyancing, by A. M. Bell; and Craigie's Statutes.

In Mercantile Law.—In addition to the Class Lectures, the books recommended are Goudy on Bankruptcy, 3rd edition; Carver on Carriage by Sea, Part I. and Part III.; Hamilton's Commentary on the Bills of Exchange Act, 1882; Bell's Principles, 10th edition, Book I., Chapter 15.

In Jurisprudence, General or Comparative.—Holland's Jurisprudence; Maine's Ancient Law; Kant's Philosophy of Law (Hastie's translation).

In the Law of Nations, or Public International Law.—Hall's International Law. Candidates are expected to show a general acquaintance with the history of Modern Europe. Pitt Cobbett's Leading Cases, and Tudor's Leading Cases in Mercantile and Maritime Law will be found useful for reference.

NOTE.—Candidates under the old regulations for LL.B. are required to sit also at the papers on Jurisprudence and International Private Law.

In International Private Law.—Rattigan's Private International Law, with the Scots cases referred to in the Class Lectures.

In Constitutional Law and History.—(1) The Outlines of English Constitutional History; (2) Existing Constitutional Law. In addition to the Class Lectures the books recommended are—Taswell-Langmead's English Constitutional History; Dicey's Law of the Constitution.

In Forensic Medicine.—Signs of Death with relation to Crime; Proximate Causes of Death; Medico-legal Forms of Death; Identity; Survivorship; Wounds; Blood-stains and their Detection; Insurance; Sexual Crimes:—Rape and Criminal Abortion; Pregnancy in its Medico-legal aspects; Infanticide and Concealment of Pregnancy; Divorce in its Medico-legal relations; Legitimacy and Paternity; Evidence of Poisoning; Poisoning by Arsenic, Belladonna, and Oxalic Acid; Alcoholism in its Medico-legal aspects; Insanity.

In Political Economy and other Arts Subjects.—The subjects of examination for the Degree of M.A.

No candidate for the Degree of B.L. is admitted to an examination in Law subjects until he has passed in all the subjects of the preliminary examinations, and not fewer than two subjects in Law can be taken up at one examination, except in case of candidates for the Degree of B.L. under the new regulations.

TABLE OF EXAMINATIONS FOR DEGREES IN LAW, TO BE HELD DURING SESSION 1906-7.

Fees. ¹	Names to be given in and Fees paid to Assistant-Clerk (Matriculation Office). Date. ²	Subjects of Examination.	DATES OF WRITTEN EXAMINATIONS AND HOURS AT WHICH THE DIFFERENT PAPERS WILL BE SET.	
			October, 1906.	April, 1907.
£1 1s. on each entry for Examination, and balance, if any, before Graduation. Total Fees— LL.B. £0 6s., B.L. £5 5s.	19th Sept., 1906, or 12th March, 1907.	Constitutional Law, -	Mon., 1st Oct., 9-12 noon.	Mon., 1st April, 9-12 noon.
		Civil Law, - - -	" " " 2-5 p.m.	" " " 2-5 p.m.
		Scots Law, - - -	Tues., 2nd " 9-12 noon.	Tues., 2nd " 9-12 noon.
		Public Internat. Law, -	" " " 2-5 p.m.	" " " 2-5 p.m.
		Jurisprudence, - -	Wed., 3rd " 9-12 noon.	Wed., 3rd " 9-12 noon.
		Internat. Private Law, -	" " " 2-5 p.m.	" " " 2-5 p.m.
		Political Economy, -	" " " 6-9 p.m.	" " " 6-9 p.m.
		Conveyancing, - -	Thurs., 4th " 9-12 noon.	Thurs., 4th " 9-12 noon.
		Forensic Medicine, -	" " " 2-4 p.m.	" " " 2-4 p.m.
		Mercantile Law, - -	Friday, 5th " 9-12 noon.	Friday, 5th " 9-12 noon.

For Dates of the Preliminary Examination and of the Examinations in Arts subjects necessary for B.L., see pp. 211 and 236.

¹ Under the old regulations the fee for LL.B. is £5 5s.; for B.L., £3 3s.

² When names are not given in and fees are not paid on or before the stated dates, a late Entry Fee of Ten Shillings must be paid before the candidate can be enrolled for examination. A candidate is not held to be enrolled for examination until his name is entered, the fee paid, and all the necessary certificates, etc., lodged.

6.—GRADUATION IN DIVINITY.

Degree of Bachelor of Divinity.

In Ordinance No. 63 the Universities Commission laid down the following regulations for this degree :—

I. No one shall be admitted to examination¹ as a candidate for the Degree of Bachelor of Divinity (B.D.) in any University unless he be (1) a graduate in Arts of that University, and have taken a complete Theological Course in a Scottish University or Universities, or in an institution or institutions specially recognised for the purpose of this ordinance by the University Court, or partly in a Scottish University or Universities and partly in such institution or institutions;² or (2) a graduate in Arts of any Scottish University or other University specially recognised as aforesaid, and have completed his Theological Course, of which not less than two years' attendance shall have been given in the University in which he presents himself for examination.

II. The examination shall in all cases be conducted at the seat of the University granting the degree, and the Examiners shall be the Professors of or Lecturers on the subjects included in the examinations, and two additional Examiners appointed by the University Court. The mode of conducting the examination shall be fixed from time to time by the *Senatus Academicus*.¹

III. Every student who at the time when this ordinance shall come into operation shall have completed a part of his Theological Course with a view to graduation as Bachelor of Divinity in any Scottish University, under regulations hitherto in force in that University, and shall thereafter complete his course of study in conformity with such regulations, may become a candidate for the Degree of Bachelor of Divinity without complying with the provisions of this ordinance.

IV. The Degree of Bachelor of Divinity shall in no case be conferred on persons who have not complied with the conditions hereinbefore set forth, and shall not be conferred *honoris causa tantum*.

This degree is conferred on such qualified candidates as have satisfied the Examiners of their proficiency in the following departments, viz. :—

I. Hebrew, New Testament Exegesis, and Apologetics.

II. Divinity, Church History, and Biblical Criticism.

Students who have completed the second year of their Divinity studies, subsequent to the termination of their course in Arts, may present themselves for examination in the First Department. Candidates are not admitted to examination in their Second Department *until they have completed their Theological Course*.

The scheme of examination for session 1906-1907 is as follows :—

I. FIRST DEPARTMENT—

(a) *Hebrew*.—(1) Isaiah xl.—lxvi.; (2) Psalms xlii.—lxxii.; (3)

¹ Ordinance No. 154 gives the *Senatus Academicus* power to admit candidates to examination in not more than three of the subjects, after the completion of the second session of attendance on their Theological course.

² The University Court has recognised *pro tanto* every Theological College in the United Kingdom having a distinct staff of teachers for the separate subjects, in so far as the Theological course is subsequent to the Arts course.

Portions of unpointed Hebrew to be punctuated and translated ; (4) Translations from English into Hebrew.

Books which may be consulted :

- (1) *Commentaries* by Delitzsch, Cheyne, von Orelli, Skinner (Cambridge Bible), and G. A. Smith ; Driver's *Isaiah, his Life and Times* ("Men of the Bible" Series) ; (2) *Commentaries* by Delitzsch, Perowne, and Cheyne ; Cheyne's *Origin of the Psalter* ; (3 and 4) Müller's or Davidson's *Hebrew Syntax* ; Robertson's *Hebrew Exercises*.
 (b) *New Testament Exegesis*.—(1) Introduction to the Gospel according to Luke ; (2) Exegesis of Luke iii. 21—x. 24, with critical comparison of the parallel passages in Matthew and Mark ; (3) Exegesis of the Epistle of James.

Books which may be consulted :

- (1) and (2) The relative *Commentaries* of Godet, Meyer, De Wette, or Alford ; Bleek, *Synoptische Erklärung der drei ersten Evangelien* ; (3) The *Commentaries* of Alford or Mayor.
 (c) *Apologetics*.—(1) Philosophy and History of Religion ; (2) Christian Apologetics ; (3) Antitheistic Theories.

Books which may be consulted :

(1) Fairbairn, *Philosophy of Christian Religion* ; Caird, *Introduction to the Philosophy of Religion*, and *Fundamental Ideas of Christianity* ; Menzies, *History of Religion* ; (2) Bruce, *Apologetics* ; Fisher, *The Grounds of Theistic and Christian Belief* ; Mair, *Studies in the Christian Evidences*. (3) Flint, *Antitheistic Theories*, and *Agnosticism*.

II. SECOND DEPARTMENT—

- (a) *Divinity*.—(1) The Doctrine of Revelation, including the Authority and Inspiration of Holy Scripture. (2) Doctrine of God. (3) The Pauline Theology.

Books which may be consulted :

Generally, the theological manuals of Hodge, Oosterzee, W. N. Clarke, or Macpherson, in the sections on Revelation and on God.

Specially—(1) Sanday, Bampton Lecture on *Inspiration* ; Ladd, *Doctrine of Sacred Scripture* ; Bruce, *Chief end of Revelation* ; Clifford, *Inspiration and Authority of the Bible*. (2) Illingworth, *Reason and Revelation* ; Candlish, *Christian Doctrine of God* ; Crawford, *Fatherhood of God*. (3) Stevens, *Pauline Theology* ; Pfeiderer, *Paulinismus*, vol. I. ; Sabatier, *L'Apôtre Paul* ; Reuss, *History of Christian Theology in the Apostolic Age*, vol. II.

- (b) *Church History*.—The Ecclesiastical History of England, Scotland, and Ireland from the death of William III. to the death of George II. (1702-1760) ; including : (I.) For England :—Church and State, Queen Anne, Sir Robert Walpole, Queen Caroline ; Dr. Sacheverell, "Occasional Conformity" and "Schism" Acts, their Repeal ; the Bangorian

Controversy, Suppression of Convocations ; the Arians, the Trinitarian Controversy ; the Deists, the Evidence-Writers ; the Religious Societies, the beginnings of Methodism ; the Non-jurors ; the Dissenters ; the Roman Catholics ; with outlines of the lives of Abp. Wake, Bps. Berkeley, Atterbury, Hoadly, Warburton, Wilson, and Butler ; Dr. Samuel Clarke, Dr. Waterland, Robert Nelson, William Law, Dr. Watts, Dr. Doddridge, Alexander Pope and the Wesleys (earlier years).

(II.) For Scotland :—Church and State, Queen Anne, the Union, Patronage restored, the '15, the '45 ; the General Assemblies, the Simson case, the "Marrow" Controversy, the growth of Moderatism, the Cambuslang revival ; the Cameronians ; the Secession ; the Episcopalians, the Usagers, the Penal Laws ; the Roman Catholics ; Deism and Infidelity ; with outlines of the lives of Carstares, Anderson of Dumbarton, Thomas Boston, Ebenezer Erskine, Col. Blackadder, Lord Pitsligo, Forbes of Culloden, and Bp. Sage ; and (III.) for Ireland :—Church and State ; the Church of Ireland ; Irish Presbyterians, the Sacramental Test, the Subscription Controversy, the Arians, the Seceders ; the Roman Catholics ; with outlines of the lives of Dean Swift, Abps. King and Boulter, Bp. Clayton, Charles Leslie, Henry Dodwell, and Thomas Evelyn.

Books which may be consulted :

The Histories of Lecky (for England and Ireland), Hume and Smollett, Stanhope, and Green ; Histories of the Church of England (parts referring to period 1702-1760) by *Overton*, *Abbey*, *Perry*, *Hutton*, and *Wakeman* ; Law's Letter to Hoadly, Bp. Butler, *Charge to the Clergy of the Diocese of Durham* ; Lathbury on *Convocation and the Nonjurors* ; Stoughton's *History of Religion in England* ; Tyerman's *Life of Wesley*, John Wesley's *Diary* ; for Scotland, *Hill Burton*, Mathieson, *Scotland and the Union* ; Sir Henry Craik, *A Century of Scottish History* ; J. Hepburn Miller, *A Literary History of Scotland* ; Acts of the General Assembly (1702-1759). Ecclesiastical Histories of Scotland by Grub, Cunningham, Stephen and Niven (in Principal Story's *The Church of Scotland*, vol. III.), Autobiography of Thomas Boston, *Marrow of Modern Divinity*, "Cases" of Simson and Leechman, *Act, Declarations, and Testimony of the Seceders* ; for Ireland :—Froude, *English in Ireland*, Church Histories of Bp. Mant, Ball, and Olden (Church of Ireland) ; James Seaton Reid, and Killen (Irish Presbyterians), and Brennan (Roman Catholic).

(c) *Biblical Criticism*.—(1) Textual Criticism. (2) Hermeneutics.

Books which may be consulted :

(1) Davidson, *Biblical Criticism* ; Tregelles, *Treatise in*

Horne's Introduction, Vol. IV.; Scrivener, *Introduction to the Criticism of the New Testament* (fourth edition); Westcott and Hort, *Prolegomena to the Greek Testament*; Nestle, *Textual Criticism of the Greek New Testament*. (2) Davidson, *Sacred Hermeneutics* (1843), or *Treatise on Interpretation in Horne's Introduction*, Vol. II.; Ernesti, *Institutio Interpretis*; Immer, *Hermeneutik des Neuen Testaments*.

The scheme of examination for session 1907-1908 will be as follows :

I. FIRST DEPARTMENT—

- (a) *Hebrew*.—(1) The books of Hosea, Amos, Micah, Nahum, Habakkuk, and Zephaniah; (2) Psalms lxxiii.—lxxxix.; (3) Portions of unpointed Hebrew to be punctuated and translated; (4) Translations from English into Hebrew.
- (b) *New Testament Exegesis*.—(1) Introduction to the Acts of the Apostles; (2) Exegesis of Mark i. 1.—viii. 26, with critical comparison of the parallel passages in Matthew and Luke; (3) Exegesis of the Pastoral Epistles.

Books which may be consulted :

(1) Lekebusch, *Die Composition und Entstehung der Apostelgeschichte*; Spitta, *Die Apostelgeschichte*; (2) The relative Commentaries of Meyer, De Wette, Morison, Swete, or Alford; Bleek, *Synoptische Erklärung der drei ersten Evangelien*; (3) The Commentaries of Alford or Ellicott.

- (c) *Apologetics*.—(1) Philosophy and History of Religion; (2) Christian Apologetics; (3) Butler's *Analogy*.

Books which may be consulted :

(1) Fairbairn, *Philosophy of Christian Religion*; Caird, *Introduction to the Philosophy of Religion*, and *Fundamental Ideas of Christianity*; Menzies, *History of Religion*. (2) Bruce, *Apologetics*; Fisher, *Grounds of Theistic and Christian Belief*; Mair, *Studies in the Christian Evidences*. (3) The *Analogy* of Butler, ed. by Joseph Angus (Religious Tract Soc.); Gladstone's *Butler*.

II. SECOND DEPARTMENT—

- (a) *Divinity*.—(1) The Doctrine of Man. (2) Doctrine of Sin. (3) The Theology of Schleiermacher.

Books which may be consulted.

(1) Beck, *Outlines of Biblical Psychology*; Laidlaw, *Bible Doctrine of Man*; Dickson, *St. Paul's use of the terms Flesh and Spirit*. (2) Müller, *Doctrine of Sin*; Tulloch, *Christian Doctrine of Sin*. (3) Pfleiderer, *Development of Theology in Germany*; Lichtenberger, *History of German Theology*; Munro, *Schleiermacher*.

- (b) *Church History*.—The Ecclesiastical History of England, Scotland, and Ireland from the death of George II. (1760) to the death of George III. (1820).
- (c) *Biblical Criticism*.—(1) Textual Criticism; (2) Hermeneutics.

TABLE OF EXAMINATIONS FOR DEGREES IN DIVINITY, FOR BLACK THEOLOGICAL
FELLOWSHIP, FOR FINDLATER SCHOLARSHIP, AND FOR JAMIESON PRIZE,
TO BE HELD DURING SESSION 1906-7.

Department.	Names to be given in and Fees paid to Assistant-Clerk (Matriculation Office). Date. ¹	Fee.	Dates of Written Examinations and Hours at which the different Papers will be set.
First.	17th October, 1906.	£2 12s. 6d.	Tues., 23rd Oct., 1906. Hebrew, - - - 9-12 noon.
			“ “ Hebrew, - - - 2-5 p.m.
			Wed., 24th Oct., 1906. Apologetics, - - - 9-12 noon.
			“ “ New Testament Exegesis, 2-5 p.m.
Second.	29th March, 1907.	£2 12s. 6d.	Thurs., 4th April, 1907. Divinity, - - - 9-12 noon.
			“ “ Textual Criticism, - 2-5 p.m.
			Frid., 5th April, 1907. Church History, - 9-12 noon.
			“ “ Hermeneutics, - - 2-5 p.m.

¹ Forms of application for examination may be obtained at the Matriculation Office. These forms, when filled up, must be forwarded by the candidates to the Dean of the Faculty of Theology, along with certificates of attendance on the required classes, and, having been certified by him, must then be transmitted to the Assistant-Clerk (Matriculation Office) on or before the date prescribed above. In entering for the Second Department candidates from other schools must produce, in addition to class certificates, evidence that they have completed, or are about to complete, their Theological Course.

7.—HONORARY DEGREES.

The powers of the *Senatus Academicus* to grant Honorary Degrees are regulated by Ordinance No. 41 of the Universities Commission (1889) of date 13th December, 1893, which received the approval of Her Majesty in Council on 28th May, 1894.

Degree of Doctor of Divinity.

The following are the regulations for the Degree of D.D. :—

I. At the commencement of every session, the *Senatus Academicus* in each University shall appoint a committee, to be called the Committee on the Degree of Doctor of Divinity, consisting of the Principal, three Professors from the Faculty of Theology (of whom the Professor of Divinity shall be one), and three other Professors to be selected by the *Senatus Academicus* from the other Faculties.

II. It shall be the duty of this committee to select persons to be recommended to the *Senatus Academicus* for the degree; but the committee shall not entertain applications from or on behalf of persons desirous of receiving the degree.

III. The committee shall present a reasoned report, embodying its recommendations to the *Senatus*.

IV. In the case of every person recommended for the degree, the report shall contain a statement of the grounds on which the recommendation is founded, specifying such particulars as the *Senatus* may from time to time require.

Under this regulation the Senate requires the following particulars to be specified, viz. :—

- (a) Whether he is an alumnus of this University, and whether he already holds the Degree of B.D., or any other University Degree.
- (b) Whether he has published a contribution of merit to Theological Literature.
- (c) Whether his character and professional standing are such as to warrant the conferring of the proposed distinction.

V. No resolution to confer the Degree of Doctor of Divinity shall be moved in the *Senatus* except upon special notice given after a fortnight has elapsed from the date when the report of the committee shall have been presented.

Degree of Doctor of Laws.

The following are the regulations for the Degree of LL.D. :—

I. At the commencement of every session, the *Senatus Academicus* in each University shall appoint a committee, to be called the Committee on the Degree of Doctor of Laws, consisting of the Principal and such Professors selected from the various Faculties as the *Senatus Academicus* may determine, provided that the total number of the committee shall not exceed twelve.

II. It shall be the duty of this committee to select persons to be recommended to the Senatus for the degree, but the committee shall not entertain applications from or on behalf of persons desirous of receiving the degree.

III. The committee shall present to the Senatus a reasoned report embodying its recommendations.

IV. In the case of every person recommended for the degree, the report shall contain a statement of the grounds on which the recommendation is founded, specifying such particulars as the Senatus may from time to time require.

Under this regulation the Senate requires the following particulars to be specified, viz.:—

- (a) Whether he is an alumnus of this or any other University, and whether he already holds any academical degree.
- (b) Whether he is the author of any work of acknowledged merit, or has otherwise contributed to the progress of learning and science.
- (c) And, in general, whether his character, profession, and position in society are such as to warrant the conferring of the proposed distinction.

V. No resolution to confer the Degree of Doctor of Laws shall be moved in the Senatus except upon special notice given after a fortnight has elapsed from the date when the report of the committee shall have been presented.

Academic Dress.

GRADUATES OF THE UNIVERSITY.

On ceremonial occasions the graduates are expected to appear in the Gown and Hood proper to their degrees.

The ordinary Gowns to be worn by graduates of the University of Glasgow are of black silk or stuff, of similar shape to those appropriated to the corresponding degrees in the other British Universities.¹

The Hoods for the different degrees, as approved by the University Court on 19th May, 1893, are as follows:—

- B.A., Black Silk, bordered inside with Red Purple Silk (colour of Bell Heather—*Erica Cinerea*).
- M.A., Black Silk, lined with Red Purple Silk.
- B.Sc., Black Silk, bordered with Scarlet Cloth and lined with Gold Coloured Silk (colour of Whin Blossom—*Ulex Europæa*).
- D.Sc., Scarlet Cloth, lined with Gold Coloured Silk.
- B.L., Black Silk, with an inside border of Venetian Red Silk (colour of Clove Carnations).

¹ The Robemakers to the University have standard patterns of the gowns, which, it may be stated for the information of those at a distance, are of the same shape with the ordinary (or undress) gowns of the corresponding degrees at Cambridge.

LL.B., Black Silk, bordered with Scarlet Cloth and lined with Venetian Red Silk.

LL.D., Scarlet Cloth, lined with Venetian Red Silk.

M.B. and C.M., Black Silk, bordered with Scarlet Cloth and lined with Scarlet Silk.

M.D., Scarlet Cloth, lined with Scarlet Silk.

B.D., Black Silk, bordered with Scarlet Cloth and lined with a light Cherry Silk.

D.D., Scarlet Cloth, lined with White Silk.

UNDER-GRADUATES.

By a Statute of the Commissioners appointed by the Act, 1690, chapter XVII., of the Parliament of Scotland, "for the Visitation of Universities and Schools," it was enacted that "all the students in the several Universities and Colleges within this kingdom be obliged to wear gowns during the time of the sitting of the Colleges," and that "the Regents or Masters be obliged to wear black gowns, and the students red gowns ; and, in regard that wearing of gowns has never been the custom in the College of Edinburgh, the Commissioners do therefore recommend to the Masters of that College to endeavour to bring the custom of wearing gowns there into practice." It appears from the University records that the wearing of red gowns had been previously the practice in Glasgow, and it continued to be the practice in all the Arts classes which existed at the date of this statute uninterruptedly till recently.

The General Council of this University having requested the University Court to recommend to the Senate the propriety of requiring the students to conform to the ancient practice of this University as to academic dress ; and the University Court having remitted the subject to the determination of the Senate, with an expression of regret that the academical dress formerly worn by the Arts students has of late years been laid aside, the Senate has given notice that the proper academic dress for students in Arts is the red gown.

While this notice does not apply to students not in the Faculty of Arts, all students in the University are entitled to wear the red gown.

CEREMONY OF GRADUATION.

The following are the regulations adopted by the Senate :—

All degrees honorary or gained by examination, shall be publicly conferred, except in special cases to be decided by the Senate.

Candidates for graduation are required to appear in black gowns with the hoods appropriate to their degrees ; those who are already graduates, in the costume proper to their previous degree.

X.—BURSARIES, SCHOLARSHIPS, *Etc.*, PRIZES.

N.B.—No alumnus of the University is allowed to hold at one time more than one Bursary, Scholarship, or Fellowship, except in cases provided for by the Regulations.

In the case of Bursaries in the gift of the Senate, in appointing to which "a preference" is to be given to certain names, *etc.*, by a "preference" the Senate understand, in every instance, a preference *ceteris paribus*.

The following is the general ordinance issued by the Universities Commission with regard to Bursaries, Scholarships, and Fellowships, which have taken effect prior to the 30th day of August, 1864 :—

ORDINANCE NO. 57 (GENERAL, NO. 19.—REGULATIONS AS TO BURSARIES, SCHOLARSHIPS, AND FELLOWSHIPS).

GENERAL.

I. For the purposes of this ordinance, bursaries in the Faculty of Arts (hereinafter referred to as bursaries in Arts) shall be deemed to be the bursaries now attached to the said Faculty by Deed of Foundation or by custom.

II. Bursaries in Arts heretofore tenable for four years shall continue to be so tenable, provided that, if the holders graduate after the three years' course, they shall only retain their bursaries during the fourth year of tenure if they shall engage in a course of study approved by the *Senatus Academicus* in subjects included in the curriculum for Degrees in Arts or in Pure Science.

III. All bursars in Arts, subject to the provision as to the fourth year of tenure contained in the immediately preceding section, shall attend in each year at least two classes qualifying for graduation in Arts, and shall duly perform the work of these classes: Provided (1) that, for the purposes of this section, the classes known as Middle Classes, so long as the same exist, may be attended in place of classes qualifying for graduation; and (2) that it shall be in the power of the *Senatus Academicus*, with the approval of the University Court, to permit such bursars as they shall from time to time select to attend classes qualifying for graduation in Pure Science in place of classes qualifying for graduation in Arts.

IV. It shall be in the power of the *Senatus Academicus* to suspend or deprive a bursar, scholar, or fellow on the ground of misconduct, or, if it think fit, on the ground of his failure to obtain class certificates or to produce such other evidence as may be required that he is prosecuting his studies in a manner satisfactory to the *Senatus Academicus*.

V. Bursaries in Divinity heretofore tenable for four years shall continue to be so tenable, provided that, if the holders graduate after the three years' course, they shall only retain their bursaries during the fourth year of tenure if they shall engage in a course of study in Divinity approved by the *Senatus Academicus*.

VI. In the case of a bursary, scholarship, or fellowship, not in the gift of a patron, becoming vacant by forfeiture or otherwise before the expiry of the period of tenure, it shall be in the power of the *Senatus*

Academicus, with the approval of the University Court, to determine as to the disposal thereof, or of the income thereof, during the remainder of the said period.

VII. Any bursary tenable in several Faculties successively shall not be attached to any one of such Faculties in any year other than a year in which in ordinary rotation it would have been attached to such Faculty.

VIII. It shall be in the power of the *Senatus Academicus* to require, as a condition of tenure, any holder of a scholarship or fellowship who is a graduate to engage in teaching within the University or to conduct tutorial classes, unless he shall satisfy the *Senatus Academicus* that he is pursuing special higher studies, or that he is engaged in original research.

IX. Each Examiner at competitions for bursaries, scholarships, or fellowships shall receive suitable remuneration, and it shall be in the power of the University Court to charge the funds of bursaries, scholarships, or fellowships with the necessary expenses of examination.

OPEN BURSARIES.

X. (1) The subjects of the examination for open bursaries in Arts of the first year shall be the subjects prescribed for the Preliminary Examination in Arts instituted by Ordinance No. 11 (General, No. 6—Regulations for Degrees in Arts), Section III. The examination shall be taken at the Spring or the Autumn Preliminary Examination, according as the University Court shall determine, and shall be upon the same papers: Provided that the *Senatus Academicus* may, for purposes of competition, subject candidates to any further test that may be deemed necessary.

(2) Candidates for such bursaries who select in the Bursary Competition Examination, Latin, Greek, or Mathematics, shall, for the purposes of the competition, take the papers of the higher standard in those subjects: Provided that nothing herein contained shall prevent a candidate passing the Preliminary Examination if he complies with the provisions of Ordinance No. 11 (General, No. 6.—Regulations for Degrees in Arts), and Ordinance No. 44 (General, No. 16.—Regulations for Degrees in Arts Supplementary to Ordinance No. 11).

(3) No candidate shall, except as hereinafter provided, obtain a bursary in Arts who shall not have passed the Preliminary Examination in Arts: Provided that it shall be in the power of the *Senatus Academicus*, with the approval of the University Court, to admit to a bursary in Arts a candidate who shall have passed in at least three subjects of the Preliminary Examination, on the condition that he shall not retain the bursary unless he shall have passed in all the subjects not later than the Second Preliminary Examination after the date of his admission as bursar: Provided also that this power shall lapse after the expiry of seven years from the date hereof unless it be renewed by ordinance.

XI. It shall be competent for the *Senatus Academicus*, with the approval of the University Court, from time to time to make regulations as to the conditions under which persons shall be eligible to compete for bursaries of the first year in the Faculties of Arts and

Science : Provided always that no student, who has during a winter or summer session attended any class qualifying for graduation in the said Faculties in any Scottish University. shall be eligible to compete for such bursaries.

XII. (1) In determining the marks to be assigned to the several subjects of the Bursary Competition Examination, English, Latin, Greek, and Mathematics shall each have assigned to them double the marks assigned to any other subject.

(2) Candidates may select not more than five subjects for examination from the subjects of the Preliminary Examination in Arts, and no candidate shall be credited with marks in any subject in which he has not obtained such proportion of the total number of marks assigned to that subject as the Senatus Academicus may from time to time prescribe.

XIII. The Senatus Academicus, in determining the results of the Bursary Competition Examination, may award bursaries in Arts of the first year in respect of exceptional distinction in any one branch of study : Provided that this power shall not be exercised with regard to more than two bursaries in any one year.

XIV. Bursaries open for competition to students entering on their first session of attendance in the Faculty of Medicine shall be tenable only by those students who have passed the Preliminary Examination in Medicine, or who have been exempted therefrom in accordance with the provisions of Section VI. of Ordinance No. 46 (St. Andrews, No. 4.—Regulations for Degrees in Medicine), Ordinance No. 14 (Glasgow, No. 1.—Regulations for Degrees in Medicine), Ordinance No. 15 (Aberdeen, No. 1.—Regulations for Degrees in Medicine), or Ordinance No. 16 (Edinburgh, No. 1.—Regulations for Degrees in Medicine), and who have not attended any class qualifying for graduation in Medicine : Provided always that the last-mentioned condition shall not be held to exclude a candidate who may have attended the class of Physics, Chemistry, Botany, or Zoology, otherwise than as part of a graduation course in Medicine.

RESTRICTED AND PREFERENTIAL BURSARIES.

XV. Candidates for bursaries in Arts which are not awarded by open competition shall present themselves for the Preliminary Examination in Arts prescribed by Ordinance No. 11 (General, No. 6.—Regulations for Degrees in Arts), Section III., and no bursary shall, except as hereinafter provided, be awarded to any candidate who shall not have passed the Preliminary Examination in Arts : Provided that it shall be in the power of the Senatus Academicus, with the approval of the University Court, to admit to a bursary in Arts not awarded by open competition a candidate who shall have passed in at least one subject of the Preliminary Examination, on the condition that he shall not retain the bursary unless he shall have passed in all the subjects not later than the Second Preliminary Examination after the date of his admission as bursar.

XVI. In the case of a bursary, scholarship, or fellowship in the gift of a patron, including bodies corporate and not corporate, becoming

vacant by forfeiture or otherwise during the period of tenure, the Senatus Academicus shall forthwith give notice of the vacancy to the patron, who may, within such time as the Senatus shall fix, appoint a qualified student to fill the vacancy; and if he fail to do so within such time, the Senatus Academicus may select a deserving student to fill the vacancy until the next Preliminary Examination at which bursaries are awarded, when the patron's right to present shall revive.

XVII. On the occurrence of a vacancy in any bursary in the gift of a patron, including bodies corporate and not corporate, at the expiry of the period of tenure, the Senatus Academicus shall give notice of such vacancy to the patron of the bursary and of the date fixed for the Preliminary Examination next ensuing at which bursaries are awarded; and the patron may, if he think fit, submit to the Senatus the names of two or more candidates eligible for such bursary, who shall undergo an examination to be conducted by the Examiners for open bursaries in the University, and the result of the examination shall be communicated to the patron for his information, who shall thereafter present to the bursary.

XVIII. In the case of a bursary in the gift of a patron, including bodies corporate and not corporate, if no qualified person be presented before the date of the Preliminary Examination intimated in terms of the immediately preceding section, the bursary shall be open to unrestricted competition for that year; and in the event of no qualified person being presented as before provided at the beginning of the next academical year, the Senatus may either throw open the bursary to unrestricted competition, or continue the same to the student to whom it had previously been awarded: Provided that this section shall not apply in cases where the patron shall previously satisfy the Senatus Academicus that proper arrangements have been made for the selection of a bursar.

MISCELLANEOUS.

XIX. In the case of bursaries designed for poor students, the Senatus Academicus shall satisfy itself that the circumstances of candidates are such as to entitle them to the benefit of the endowment, and for this purpose the Senatus may require that a declaration be made by a parent or guardian, or by the minister of religion or schoolmaster, of each candidate as the Court shall think fit.

XX. [Preferences and restrictions cancelled. These have been noted under each bursary concerned.]

XXI. Nothing herein contained shall apply to any bursary or endowment granted by any incorporation or society whose funds, capital or revenue, have been and are contributed and paid by the members of such incorporation or society by way of entry monies or other fixed or stated contributions.

XXII. The Senatus Academicus, with the approval of the University Court, shall prescribe the subjects of examination and the conditions of competition for bursaries, scholarships, or fellowships, in so far as the same are not prescribed by ordinance or by deed of foundation.

XXIII. The provisions of any Ordinance of the Commissioners under

the Universities (Scotland) Act, 1858, in so far as inconsistent with the provisions of this ordinance, are hereby repealed.

XXIV. This ordinance shall come into force from and after the 1st day of January, 1895, or as soon thereafter as it may be approved by Her Majesty in Council: Provided that nothing herein contained shall extend to, or affect the interests of, any person holding a bursary, scholarship, or fellowship at the date of its coming into effect. [Issued on 30th July, 1894; approved on 11th May, 1895.]

BURSARIES FOR WOMEN.

On 10th March, 1898, the University Court, in virtue of the power conferred by Ordinance No. 58, Section I., resolved to appropriate to competition, without restriction as to sex, all the open bursaries tenable in Arts, Science, or Medicine, which have taken effect prior to 30th August, 1864. To a number of other Bursaries either men or women may be appointed. In the following lists of Bursaries arranged according to Faculties, *italics* are used in printing the names of those Bursaries for which both men and women are eligible.

A.—BURSARIES ARRANGED ACCORDING TO FACULTIES.

BURSARIES IN THE FACULTY OF THEOLOGY.

Bursars in the Faculty of Theology are required to attend each session the Divinity Class and any two of the three classes of Hebrew, Church History, and Biblical Criticism.

FOUNDATION.	No. of Bursaries.	Period of Tenure.	Approximate Annual Value of each.
		Years.	
Adam, John, - - - - -	3	4	£18
Black, - - - - -	2	3	£38
Boyd and Sanders, - - - - -	1	3	£13 16/8
Boyd and Wilson, - - - - -	1	3	£24 6/8
Brown or Ettles, - - - - -	2	3	£28
Dundonald, - - - - -	6	3	£41 2, 6
Gilhagie and Struthers, - - - - -	1	3	£19 12/8
Hamilton, - - - - -	3	3	£25
Hastie, - - - - -	2	3	£26
Logan, - - - - -	1	3	£17
Lorimer, - - - - -	4	3	£24 and £16
Lumsden, - - - - -	1	4	£15
Macfarlane, James, - - - - -	1	3	£25
Marshall, - - - - -	1	4	£16
Morgan, - - - - -	8	1	£20
Muir, - - - - -	1	3	£32
Muir Divinity, - - - - -	2	2	£25
Notman, - - - - -	1	3	£18
Ross, John, jun., - - - - -	1	3	£32
King William's, - - - - -	2	3	£20

BURSARIES IN THE FACULTY OF LAW.

Cunninghame, Andrew, - - - - -	2	1	£35
Macfarlane, Robert, - - - - -	3	3 and 1	£27
Merchants' House, - - - - -	1	3	£25
Walkinshaw-Young, - - - - -	1	2	£16
Major Young's Fund, - - - - -	2	6 and 2	£22

BURSARIES IN THE FACULTY OF MEDICINE.

FOUNDATION.	No. of Bursaries.	Period of Tenure.	Approximate Annual Value of each.
		Years.	
Arthur, ¹ - - - - -	1	3	£20
Brisbane, - - - - -	1	4	£40
Buchanan Society, ² - - - - -	2	4 or 5	£35
Davidson, - - - - -	1	3	£32
Gardiner, ² - - - - -	1	2	£14
Gibson, Dr. Thomas, ² - - - - -	1	4	£36
Glasgow Highland Society, - - - - -	7	4	£25
Logan, ² - - - - -	1	4	£17
Lorimer, - - - - -	4	3	£24 and £16
Macarthur, - - - - -	1	2	£20
Macfarlane, John, - - - - -	1	3	£40
Mackintosh, ² - - - - -	1	1	£31
Marshall, - - - - -	1	4	£16
Merchants' House, - - - - -	2	4	£25
Monteith, John, - - - - -	2	2	£21
Paterson, James A., - - - - -	8	4	£25 and £20
Rainy, - - - - -	2	2	£20
Walton, - - - - -	1	4	£34
Weir, Andrew, - - - - -	1	1	£16

BURSARIES IN THE FACULTY OF SCIENCE.

Agricultural College, - - - - -	5	4	£40 and £35
Buchanan Society, ² - - - - -	1	4	£30
Cuthbertson, Donald, - - - - -	1	3	£32
Kerr, Malcolm, - - - - -	2	3	£22
M'Ewen, Malcolm (Arts or Science), - - - - -	1	4	£16
Metcalfe, - - - - -	4	2	£25
Muir (Civil Engineering), - - - - -	2	1	£12 10/
Pender Memorial, - - - - -	1	1	£52
Shipwrights' Company, - - - - -	1	3	£50
Strang, - - - - -	4	3	£20
Young, George, - - - - -	1	1	£35

BURSARIES IN THE FACULTY OF ARTS.

Bursars in the Faculty of Arts are required to attend at least two classes each session.

Adam, James, - - - - -	2	4	£11
Adamson, - - - - -	1	3 or 4	£20
Barbour (Kilbarchan), - - - - -	1	3	£20
Biggart Memorial, - - - - -	10	4	£25
Black, - - - - -	2	4	£19
Blackquarry School, - - - - -	1	4	£12
Brand, - - - - -	3	4	£27
Brown, Ebenezer, - - - - -	1	3	£38
Browne (Ayrshire), - - - - -	2	4	£22
Brown-Paton, - - - - -	2	3	£16
Buchanan, ² - - - - -	2	3	£13
Buchanan Society, ² - - - - -	3	3	£20
Clark, John (Mile-end), ² - - - - -	24	4	£30
Cowan, - - - - -	1	3	£26 13/4

¹ Open to women students only.

² Both men and women are eligible.

BURSARIES IN THE FACULTY OF ARTS—*Continued.*

FOUNDATION.	No. of Bursaries.	Period of Tenure.	Approximate Annual Value of each.
		Years.	
Craig, - - - - -	1	4	£25
Craig, Archibald, - - - - -	1	2	£9
Crawford and Brown, ¹ - - - - -	1	4	£19 13/4
Davidson, - - - - -	1	3	£32
Duncan's Bute, - - - - -	2	4	£35
Dundonald, - - - - -	8	4	£40
Ewing, James, - - - - -	4	4	£20
Forfar, ¹ - - - - -	5	4	£36
Forrester, ¹ - - - - -	1	3	£24
Foundation, ¹ - - - - -	2	4	£20
Franco-Scottish Society, ¹ - - - - -	4	1	£30
Fullarton of Overton, - - - - -	5	2	£22
Gardiner, ¹ - - - - -	1	2	£14
Gartmore, ¹ - - - - -	1	3	£21
General Council, ¹ - - - - -	4	3 or 2	£20
Glasgow City Educational Endow'm'ts, ¹	20	4 or 2	£25
Grant, George, ¹ - - - - -	1	3 or 4	£38
Grant, George, jun., ¹ - - - - -	1	4	£38
Hamilton, - - - - -	3	3	£20
Hamilton Educational Trust, - - - - -	3	3	£20
Hannay, - - - - -	3	3	£15
Hastie, ¹ - - - - -	1	4	£26
Highland Society, Glasgow, ¹ - - - - -	12	4	£20
Hill, ¹ - - - - -	2	3	£15
Howison and Gilchrist, - - - - -	1	4	£10
Hutchesons' Educational Trust, - - - - -	20	4	£20
Hyndford and Ross, - - - - -	1	4	£10 16/8
Jaffrey, John Ferguson, - - - - -	1	2	£34
Kerr, Malcolm (Nat. Phil.), - - - - -	1	3	£22
Laing, Alexander, - - - - -	1	3	£20
Laird, James, ¹ - - - - -	8	4	£25
Lanfane, ¹ - - - - -	6	2	£27
Leadbetter, - - - - -	1	4	£9
Leyden, John, - - - - -	1	3	£13
Lochhead, James, - - - - -	1	3	£16
Lochhead and Mitchell, - - - - -	2	4	£33
Lorimer (Phil.), - - - - -	4	3	£24 and £16
Lorimer (Math.), ¹ - - - - -	4	3	£24 and £16
Lusk, - - - - -	1	3	£35
M'Crie, - - - - -	4	4	£25
M'Culloch, - - - - -	1	4	£18
MacDougall, - - - - -	3	3	£33
M'Ewen, Malcolm (Arts or Science), - - - - -	1	4	£16
M'Farlane, Robert (Arts or Law), - - - - -	1	3	£27
MacGrouther, - - - - -	2	4	£20 and £15
M'Kissack, - - - - -	1	4	£20
Maclean Trust, - - - - -	4	4	£25
Maitland Club, - - - - -	1	—	—
Manderson, Alexander, - - - - -	1	3	£15
Marshall Trust, ¹ - - - - -	20	5	£30
Menzies, - - - - -	4	4	£45
Merchants' House, - - - - -	1	4	£25

¹ Both men and women are eligible.

BURSARIES IN THE FACULTY OF ARTS—*Continued.*

FOUNDATION.	No. of Bursaries.	Period of Tenure.	Approximate Annual Value of each.
		Years.	
Monteith, - - - - -	3	3	£14.
Morgan, - - - - -	16	1	£20
Muir (Mathematics, Senior), - - -	1	1	£16
Muir (Mathematics, Junior), - - -	1	2	£8
Paterson, James, - - - - -	1	4	£20
Paterson, James, - - - - -	1	3	£20
Paterson, James A., - - - - -	8	3	£30, £20, and £10
Patrick, - - - - -	3	4	£32
Perthshire Society, - - - - -	1	3	£25
Pollock, - - - - -	3	3	£37
Ramsay-Walker, - - - - -	2	4	£12
Scott (<i>Sir Walter</i>), ¹ - - - - -	3	4	£25
Stevenson of Dalry, - - - - -	2	4	£33
Stewart, A. & B., ¹ - - - - -	7	4	£20
Stewart, ¹ - - - - -	3	4	£15
Thomson, James (Philosophical), -	1	2	£10
King William's, ¹ - - - - -	2	3	£15
BURSARIES IN THE FACULTIES OF ARTS AND THEOLOGY.			
Ardkinglass, - - - - -	1	6	£9 10/
Buchanan (Bellfield), - - - - -	2	7	£47
Leighton, - - - - -	1	3	£18
Williams, - - - - -	4	3 or 4	£40
BURSARY IN THE FACULTIES OF ARTS OR THEOLOGY.			
Lamb, ¹ - - - - -	1	—	£12
Simson, - - - - -	1	—	£18
BURSARIES IN THE FACULTIES OF LAW OR MEDICINE.			
Stewart, A. & B., ¹ - - - - -	4	3	£50
BURSARIES IN THE FACULTIES OF ARTS, LAW, OR MEDICINE.			
Macdonald, - - - - -	2	4	£16
William Whyte, - - - - -	4	4	£25
BURSARIES IN THE FACULTIES OF THEOLOGY, LAW, OR MEDICINE.			
Armagh, ¹ - - - - -	3	3	£48
Bell, - - - - -	—	—	£50
Hutcheson, Thomas, - - - - -	1	4	£11 2/2 ³
BURSARIES IN ANY FACULTY.			
Ayrshire Society, ¹ - - - - -	4	3	£15
Denny, - - - - -	4	4	£30
Dumfriesshire Society, ¹ - - - - -	2	4	£15
Ferguson, James, - - - - -	2	2	£95
Forrest, - - - - -	5	5 or less	£22
Gibson, John, - - - - -	2	3	£20
Kintyre (Ker), - - - - -	1	3	£20
Kintyre (Alexander Love), - - -	1	4	£11
M'Kechnie, - - - - -	2	4	£35
Pratt, ¹ - - - - -	2	4	£20
Shearer, - - - - -	3	3	£30
Smith, - - - - -	1	4	£18
Stillie, ¹ - - - - -	1	1	£5
Taylor, ¹ - - - - -	2	4	£7

¹ Both men and women are eligible.

B.—BURSARIES (ALPHABETICALLY ARRANGED).

JAMES ADAM BURSARIES (*Arts*).—These bursaries were founded by the Rev. James Adam, Minister of Cumbernauld, who died in 1830, and were originally three in number. In appointing to one of the bursaries, preference was given to the kindred of the founder, and in appointing to another to students of the name of Adam. By Ordinance No. 80 of the Universities Commission (1889) these restrictions were removed, and the three bursaries were combined into two of equal value. The bursaries are tenable for four years, but if a bursar graduate at the end of three years he shall only retain his bursary during the fourth year of tenure if he shall engage in a course of study approved by the Senate in subjects included in the curriculum for Degrees in Arts or in Pure Science. In other respects the provisions of Ordinance No. 57 apply to these bursaries. The appointment is vested in the Earl of Glasgow, the Professor of Divinity, and the Minister of Cumbernauld, the exercise of their patronage being regulated by Ordinance No. 57, Sections xv.—xviii. Value, about £11 per annum each.

Bursars—James B. Gordon, 1905 ; George L. Macpherson, 1905.

JOHN ADAM BURSARIES (*Theology*).—Three in number, founded by Mr. John Adam, of the Inner Temple, who died in 1836. The founder gave a preference to his own kindred and to students of the name of Adam or Dollar. By Ordinance No. 57 of the Universities Commission (1889) this preference was cancelled. They are open to competition to students in Theology of the first year ; and, after examination, are adjudged to the three students who shall be declared to be the most deserving, and to have made the highest attainments in Latin, Greek, Logic, Moral and Natural Philosophy, and Mathematics. The trustees and patrons are the Principal, the Professor of Theology, and the five Professors of the Gown Classes. These Bursaries are tenable for four years, subject to the provisions of Ordinance 57, Section v. Value, £18 to each bursar. (Two vacancies).

Bursar—Hugh C. McCall, 1904.

ADAMSON BURSARY (*Arts*).—This Bursary was founded by the Rev. David Adamson, minister of Fintry, in 1674, for a student in Philosophy, and was restricted to sons of freemen in one of the seven Incorporate Trades of Stirling. This restriction was removed by Ordinance No. 57 of the Universities Commission (1889). The Bursary is tenable for four years by a student entering the Greek Class, for three years by a student entering the Logic Class ; and the appointment is vested in the Convener Court of Stirling. Value, the free proceeds of the capital, which now amounts to about £500.

Bursar—David Bennett, 1904.

AGRICULTURAL COLLEGE BURSARIES (*Science*).—The Governors of the West of Scotland Agricultural College have instituted a scheme

of Bursaries, of the value of £40 and £35 respectively, each tenable for four years. They are awarded on the results of the Science Preliminary Examination held in Autumn. Bursars must attend the curriculum of classes in Glasgow, and comply with the conditions required to qualify for the degree of B.Sc. in Agriculture of the University of Glasgow, and must further present themselves at the examinations for the National Diploma in Agriculture. Further particulars may be ascertained by applying to Principal Wright, 6 Blythswood Square, who will receive applications up to 1st September. (Two vacancies.)

Bursars—¹John H. Smith (£40), 1903; ¹James Johnston (£35), 1903; John Brown (£40), 1904; John Dunlop (£35), 1904; Renwick Leitch (£40), 1905 (four years).

ARDKINGGLASS BURSARY (*Arts and Theology*).—This Bursary was founded in 1733, by Sir James and Lady Campbell, out of a fund which Colonel John Blackader of Barndennoch, Glencairn, Dumfriesshire, had by his Will set aside for pious uses, and was tenable for eight years—five in Languages and Philosophy, and three in Divinity. It is now regulated by Ordinance No. 87 of the Universities Commission (1889). A bursar may hold the Ardkinglass Bursary for three years in the Faculty of Arts, and for three years in the Faculty of Divinity, and no longer; but a bursar, who at the end of the third year of his tenure has failed to pass all the examinations necessary for graduation in Arts, shall forfeit the Bursary, and in that event it shall be lawful for the patron to nominate a candidate, who shall be a Master of Arts, or shall have passed the examinations necessary for admitting him to that Degree, and shall be entering on his course of study in the Faculty of Divinity; failing such nomination by the patron, the Bursary shall be awarded by the Senate to a candidate qualified as aforesaid, under such conditions as the Senate shall prescribe, but a Bursar thus nominated shall not hold the Bursary for more than three years. In other respects the provisions of Ordinance No. 57 apply to the Ardkinglass Bursary. Patron, Mr. Geo. F. W. Callander of Ardkinglass and Craigforth. Value, £9 10s.

Bursar—James H. Cockburn, 1904.

ARMAGH BURSARIES (*Theology, Law, or Medicine*).—Three in number, founded in 1733 by Hugh Boulter, Archbishop of Armagh, who endowed the College with the annual rent of certain lands in the neighbourhood of Glasgow. By ordinance of the Universities Commission (1858) these three Bursaries were raised from £15 to £25 per annum each (the funds having accumulated through vacancies), and the restrictions as to birthplace were removed.

Further regulations were laid down in Ordinance No. 92 of the Universities Commission (1889). The Bursaries are now each

¹ Vacant through lapse of time.

of the annual value of £48, and are open by competition to students who are presenting themselves for the final examination for the Degree of Master of Arts with Honours in the following rotation: (1) Classics, (2) Mental Philosophy, (3) Mathematics and Natural Philosophy. They are tenable for three years, during which the holders must give regular attendance on the classes of this University, as students of Theology, Law, or Medicine. In other respects the provisions of Ordinance No. 57 apply to the Bursaries on this Foundation. In October, 1906, one Bursary, tenable for two years, will be open to competition, the subject of examination being Classics; and one, tenable for three years, the subject of examination being Mental Philosophy.

Bursars—¹Robert A. C. Macmillan (Mental Philosophy), 1904 (2 years); Andrew Henderson (Math. and Nat. Phil.), 1904.

ARTHUR BURSARY OR SCHOLARSHIP (*Medicine*).—Founded in 1892 by Mrs. Arthur of Barshaw. This Bursary is at present of the annual value of £20. It is open to women students in the Medical School at Queen Margaret College. It is to be awarded by the Trustees to the student who shall take the highest place among the Queen Margaret College candidates at the First Professional Examination held in the University before the commencement of the winter session in which an appointment falls to be made, provided always that a candidate may take part of her examination in the March or April preceding. If two students are of equal merit, the Bursary will be divided between them, and if more than two are equal, a special examination may be held to determine who shall be the recipient. The Bursary is tenable for three years, subject to the condition that the Bursar prosecute her medical studies with the approval of the Trustees.

Bursar or Scholar—Jessie C. Russell, 1904.

GLASGOW AYRSHIRE SOCIETY'S BURSARIES (*Any Faculty*).—Four in number, founded in 1868 and 1879 by the Glasgow Ayrshire Society, and consisting of the free annual proceeds of a sum of £1,501 11s. subscribed by members of the Society, to be devoted to the establishment of bursaries in the University of Glasgow, and invested for that purpose. The bursaries, which are at present £15 per annum each, are tenable for not more than three years, and are open to applicants of either sex between the ages of 14 and 24, who are descendants of members of the Society, or natives of Ayrshire, or sons or daughters of natives resident in Glasgow, who are in circumstances rendering the aid of a bursary necessary or desirable. Patrons—the Directors and Office-bearers of the Society. Secretary, Mr. Alexander M'Lennan, 92 St. Vincent Street, Glasgow. (Two vacancies.)

Bursars—John Talman, 1905; Thomas M'Vittie, 1905.

¹ Vacant through lapse of time.

BARBOUR KILBARCHAN BURSARY (*Arts*).—Founded in 1887 by the Executors of Miss Mary Barbour of Plymouth Grove, Manchester, who bequeathed £500 free of legacy duty for the purpose of endowing a scholarship for the Board School of Kilbarchan, Renfrewshire. The bursary is open to students of the first year, and is tenable for three years. Candidates must not exceed the age of eighteen years, must produce a certificate from the Kilbarchan School Board that they have attended three years at the Kilbarchan Village or Town Board School, are of irreproachable character, and have given satisfactory evidence of good natural ability, diligence and proficiency in their studies, and must be examined at the ordinary Bursary Examination. (Vacant.)

BELL BURSARIES.—Mrs. Mary Allan Bell, of Nether Culzean, Maybole, who died on 7th February, 1899, at Glenae, Dumfries, in her Trust Disposition and Settlement of date 21st October, 1895, directed her Trustees, after the death of her husband, to apply the income of the residue of her estate in perpetuity in providing bursaries of £50 each for necessitous deserving students of Medicine, Law, or Theology in this University. Only those who have gone through the Arts curriculum are to be eligible, with a preference, *cæteris paribus*, first to the name Turnbull, and next to the name Macdowall. The Bursaries are to be awarded by competition, the examination being conducted both orally and in writing by two examiners appointed by the Trustees. Each Bursary is to be tenable for three or four years, as the Trustees may decide.

BIGGART MEMORIAL BURSARIES (*Arts*).—Founded in 1876 by Mr. Thomas Biggart of Baidlandhill, Dalry, Ayrshire, in memory of his son, Thomas Biggart, an alumnus of Glasgow University, who died in 1874. The bursaries are open to competition at the annual Bursary and Preliminary Examination to students who are entering on the Arts Course at the University of Glasgow, with a view to the ministry of the United Free Church, and are designed to enable such students more easily to pursue that curriculum and obtain, as far as practicable, the Degree of Master of Arts.

The bursaries are tenable for four years, and the yearly value of each is £25. The Bursary Fund consisted of the sum of £6,000, and the deed of foundation provided that the surplus revenue, if any, may be applied to prolong the tenure of any of the bursars for a fifth year, or to the granting of additional bursaries on the same conditions as are applicable to the others.

Each bursary is payable by equal moieties on the second day of February and at the close of the winter session; and the bursar, on applying to the Principal for a precept for the second moiety, is required in each year to produce, besides the usual certificate from the Professors, a certificate signed by the Chairman and Clerk of the Theological Committee of the United Free Assembly, to the effect

of his being recognised by that Church as an accepted student, pursuing his studies with a view to the ministry therein. (Two Vacancies.)

Bursars—Louis C. Phillips, 1903 ; William A. Murdoch, 1903 ; Alexander D. Muir, 1904 ; John V. McLean, 1905.

BLACK BURSARIES (Arts).—Founded by Mrs. Janet Black, widow of the Rev. William Black, D.D., Minister of the Barony Parish, Glasgow. Mrs. Black died in 1876, and by her Settlement, made provision, *inter alia*, for the institution of two bursaries in Arts, each of which is now of the annual value of £19. The bursaries are open to competition to students entering on their first session in the University, and are awarded to students who, having passed the Arts Preliminary, have gained the highest marks in Mathematics in the Bursary Examination, and have not obtained a bursary in the general competition. The bursars are required to attend the qualifying courses for a degree in Arts.

Bursars—¹William G. Waddell, 1902 ; Thomas Lindsay (Math.) 1904.

BLACK BURSARIES (Theology).—Founded by Mrs. Janet Black—who died in 1876—in memory of her husband, William Black, D.D., Minister of the Barony Parish of Glasgow. The bursaries are entrance bursaries, two in number, each of the annual value of £38, tenable for three years. The competition is open to candidates holding a degree in Arts in any Scottish University, or who have passed their examinations in any four subjects taken from at least two departments for graduation in Arts. Candidates must be members of the Established Church of Scotland.

Bursars—¹John A. G. Thomson, M.A., 1903 ; Robert H. Napier, M.A., 1905.

BLACKQUARRY SCHOOL BURSARY (Arts).—Founded in 1876 by the Trustees of the Blackquarry School, Port-Dundas, Glasgow. The Police Board of Glasgow having acquired the school compulsorily under "The Glasgow Police Acts," the Trustees resolved to apply the proceeds, after payment of all claims upon the institution, in founding a Bursary in the University of Glasgow. The Bursary is open to competition to Students in the Faculty of Arts on their first entering the University, under the same regulations as those of the competition Bursaries in the University, and is tenable for four years, subject to the condition that the Bursar shall attend the qualifying course for the Degree of M.A. Value, the annual income of a sum of £420 (about £12).

Bursar—John T. Black, 1905.

BOYD AND SANDERS BURSARY (Theology).—In 1635, Mr. Zachary Boyd founded three Bursaries for students in Divinity, tenable for

¹ Vacant through lapse of time.

two or four years, each of the value of £5 10s. per annum. The appointment to one of these was vested in the Merchants' House of Glasgow; and the patrons of the other two were the members of the City Council. Preference to burgesses' sons, particularly of the name of Boyd.

The Bursary, value £5 10s., in the gift of the Merchants' House of Glasgow, and the Sanders Bursary, value £8 6s. 8d., founded in 1728 by Mr. Robert Sanders of Auldhouse, also in the gift of the Merchants' House, were, by an order obtained under the authority of the Endowed Institutions Commission in 1880, conjoined into one Bursary of £13 16s. 8d. per annum, tenable for not more than three years by a student attending the ordinary curriculum in the Faculty of Theology at the University of Glasgow. The preference, *cæteris paribus*, to the names Boyd, Sanders, Corbet, Colquhoun, and Wardrop, was cancelled by Ordinance No. 57 of the Universities Commission (1889). When a vacancy occurs applications are to be lodged with Wm. H. Hill, LL.D., Clerk of the Merchants' House, on or before 1st September.

Bursar—David G. Milne, 1904.

BOYD AND WILSON BURSARY (*Theology*).—By ordinance of the Universities Commissioners of date 17th May, 1862, the two Boyd Bursaries in the gift of the Magistrates and Town Council of Glasgow (see above) were conjoined into one, tenable for three years, the Bursar to be M.A. By an ordinance of the same date the two Bursaries, value £6 13s. 4d. per annum each, which were founded by Mr. Michael Wilson in 1640, and placed under the same patronage, were also conjoined into one, tenable for three years, the holder to be M.A. in regular attendance at the University as a student of Theology. Restrictions as to kindred, etc., were in both cases abolished.

This Boyd Bursary and this Wilson Bursary were, by Ordinance No. 78 of the Universities Commission (1889), conjoined into one Bursary, called the Boyd and Wilson Bursary, value £24 6s. 8d. per annum. The holder must be a Master of Arts of a Scottish University. The Bursary is tenable for three years, provided that the Bursar shall, during that period, give regular attendance as a student of Theology in Glasgow University. When a vacancy occurs, applications are to be lodged with the Town Clerk, City Chambers, not later than 1st September.

Bursar—William Potter, M.A., 1905.

BRAND BURSARIES (*Arts*).—Mr. Robert Brand, son of the late Mr. Robert Brand, coalmaster, Wishaw, by his Trust Disposition and Settlement, dated 28th June, 1873, directed his Trustees to pay to the Senatus of the University of Glasgow the sum of £2,000,

the income of said sum to be applied in payment of three Bursaries in Arts for the behoof of students in the University who shall be studying with a view to the ministry of the United Free Church. Mr. Brand died on 3rd July, 1873, but, in consequence of litigation, it was not till January, 1875, that the bequest, amounting, with interest, to the sum of £2,121 7s. 5d., was paid by the Trustees to the Senate. The Bursaries, which are tenable for four years, are of the annual value of about £27 each, and are awarded by public competition to students entering their first or second session in the Faculty of Arts; the Bursars to graduate as M.A. at the end of their course.

Bursars—¹William King, 1902; Joseph W. Buchanan, 1903; Hector J. W. Hetherington, 1905.

BRISBANE BURSARY (*Medicine*).—Founded by Miss Christian Brisbane in 1777, in fulfilment of the intentions of her brother, Dr. John Brisbane of Balbegno. Their father, Dr. Thomas Brisbane, was the first Professor of Anatomy in this University.

It is tenable by a student of Medicine for four years, and the salary is about £40 per annum. The family of Brisbane and the University present alternately. Candidates must be under twenty-two years of age, and must have the Degree of M.A.

The preference formerly given to the kin of the founder was cancelled by Ordinance No. 57 of the Universities Commission (1889).

Bursar—John C. Middleton, M.A., 1904.

BROWN BURSARY.—See Crawford and Brown, p. 318.

BROWN OR ETTLES BURSARIES (*Theology*).—Two in number, founded in 1867 by Miss Ettles of Inverness, in memory of her brother-in-law, Dr. E. Brown, an alumnus of this University. The Bursaries consist of the annual interest and proceeds of a sum of £1,000, and are open to competition to first year's students of Divinity who have passed all the examinations required for the ordinary Degree of M.A.; with a preference, *cæteris paribus*, to such as can speak Gaelic. The Bursaries are now each of the annual value of £28, and are tenable for three years.

Bursars—William Clark, M.A., 1905; William D. Macgill, M.A., 1905.

EBENEZER BROWN BURSARY (*Arts*).—Founded in 1884 under the Trust Disposition and Settlement of Mr. Ebenezer Brown, export bottler, West Campbell Street, Glasgow. Mr. Brown, who died on 31st July, 1883, bequeathed to the Senate the sum of £1,000, free of legacy duty, for the purpose of founding and maintaining a bursary in the Faculty of Arts, to be granted to the student who shall stand

¹ Vacant through lapse of time.

highest in a competitive examination on such subject or subjects in Arts as the Senate may prescribe. The Senate have full power to vary such subject or subjects from year to year, and to lay down such regulations regarding the bursary as they may see fit. The bursary is open to competition to all students entering on their first or second year of attendance, provided that no student in his second year shall be eligible who on entering upon his first year of attendance passed the whole Preliminary Examination. It is tenable for three years. Present value, £38 per annum.

Bursar—Caleb A. Stewart, 1905.

BROWNE (AYRSHIRE) BURSARIES (Arts).—Two in number, tenable for four years, and each of the annual value of about £22, founded in 1871 by Mr. Hugh Browne, residing at Darvel, in the county of Ayr, who for this purpose, and in memory of his brother, the late Dr. Alexander Browne of Buenos Ayres, mortified to the University of Glasgow the sum of £1,000. The bursaries are awarded by competition. Candidates must be natives of the county of Ayr, or must have been educated for not less than four years in a school within the said county, and must be entering on their first session at the University. (One vacancy.)

Bursars—David T. Leggat, 1902 ; James Black, 1904.

BROWN-PATON BURSARIES (Arts).—Founded in 1891 by Mr. Andrew Brown-Paton, Liverpool, in memory of his father, mother, and three sisters. The bursaries are two in number, and are tenable for three years. They are open for competition to students of the first year, with a preference to natives of the parishes of Loudon or Galston in Ayrshire. Should no candidate from either of these parishes come up to the standard of the Entrance Examination then held in Arts, the bursaries are open to candidates from any part of Ayrshire. Failing qualified candidates from Ayrshire, the bursaries are open to all students of the first year. In case of a vacancy, otherwise than by lapse of time, a student of the same standing is appointed by the Senate by examination or otherwise. Each bursar receives one half of the free proceeds of the capital sum, £1,000, paid over to the University Court by the founder. (One vacancy.)

Bursar—¹ John Wilson, 1903 ; John Falconer, 1905.

BUCHANAN BURSARIES (Arts).—Founded by the late Robert Buchanan, LL.D., Ardillayne, Dunoon, formerly Professor of Logic and Rhetoric in the University of Glasgow, by Codicils to his Will, dated 26th December, 1871, and 26th March, 1872, in which, as a "token or expression of his gratitude and respect to the University of Glasgow, with which, as a student, or Professor, or member of the University Court, he had been connected for the space of fifty years," he bequeathed the sum of £1,000 for the purpose of founding a Bursary or Bursaries for students in the Faculty of Arts, on the con-

¹ Vacant through lapse of time.

ditions that may appear to the Senatus best for the interests of the University. The Senate resolved to apply the annual proceeds to the support of two Bursars in Arts, each to hold his Bursary for three years, subject to the usual condition of attending two of the classes of the curriculum in each session; the Bursars to be appointed by competitive examination among students of either sex of the first year. The Bursaries are awarded to competitors who, having passed the Arts Preliminary, have gained the highest marks in Dynamics in the Bursary examination, and have not obtained a bursary of greater value in the general competition. Present value, £13 to each Bursar.

Bursars—James Watson, 1904; John A. Harper (Dynamics), 1905.

BUCHANAN (BELLFIELD) BURSARIES (*Arts and Theology*).—Founded in 1875, in accordance with the Trust Disposition and Deed of Settlement of the late Misses Margaret Jane and Elizabeth Buchanan of Bellfield, Glasgow. The Bursaries are two in number, and consist of the yearly proceeds of a sum of £4,200, vested in Reduced 3 per cent. Annuities. Open to matriculated students who may be prosecuting their studies at the University of Glasgow, with a view to their becoming licentiates and clergymen of the Established Church of Scotland. The Patrons are the Principal and such of the Professors as hold their appointments from the University Court. The Bursaries are tenable during the whole curriculum "or such portion thereof as to the said Principal and Professors may seem proper." The Bursars are appointed by competitive examination among students of the first and second years in Arts. Present value, £47 per annum to each Bursar.

Bursars—Alexander B. Harper, 1903; Robert J. Thomson, 1904.

BUCHANAN SOCIETY BURSARIES (*Arts or Science or Medicine*).—These bursaries have in the meantime been suspended. The Directors have, however, reserved power to award to Arts, Science, and Medical Students Bursaries tenable at Scottish Universities, the amounts, conditions, and periods of tenure being in the discretion of the Directors.

Bursars—Murdo Buchanan (Medical, 6 years), 1900; Donald Buchanan (Medical, 5 years), 1903; James M. Macmillan (Medical, 5 years), 1903; Flora Macmillan (Arts, 3 years), 1904; William H. Macmillan (Science, 4 years), 1905.

GEORGE A. CLARK BURSARIES OR SCHOLARSHIPS (*Arts, etc.*).—(See under "Scholarships.")

JOHN CLARK (MILE-END) BURSARIES (*Arts*).—Founded in 1868, in accordance with the Trust Disposition and Deed of Settlement of the deceased Mr. John Clark, junior, of the firm of John Clark,

junior, & Co., thread manufacturers, Mile-End, Glasgow. By a Deed of Constitution of date 1st August, 1866, the "Clark Bursary Fund" is placed under the management of twelve trustees. The Bursaries are to be at least two in number, of the annual value of £30, open for competition to all Protestant students of good moral character, sons or daughters of Protestant parents, entering on their first session in the Faculty of Arts (a preference, *cæteris paribus*, given to orphans), and are tenable for four years, subject to the condition that the Bursars proceed through the curriculum of Arts in Glasgow University. On 29th October, 1897, the Trustees resolved that it should not be competent for any one appointed after that date to a John Clark (Mile-End) Bursary to hold any other Bursary or Scholarship concurrently with it, except with the consent of the Trustees. The competition is to be in writing, and the trustees are to appoint the subjects of examination. The Bursary fund consists of the residue of the Testator's estate, said residue amounting to upwards of £35,000. Six Bursaries on this foundation will be open to competition in October, 1906; and will be awarded, four for general excellence, one for special excellence in French, and one for special excellence in German. Awards for the Bursaries for French and German are made only to competitors who have passed the Arts Preliminary and have not obtained any Bursary for general excellence.

Bursars—¹James C. M. Fairlie, 1902; ¹Alexander C. Grant, 1902; ¹Thomas Miller, 1902; ¹John M-Whan, 1902; ¹Leonard J. Russell, 1902; George Anderson, 1903; John W. Tait, 1903; Oswald J. Gardner, 1903; Charles E. Duff, 1903; Annie M. Macphail (German), 1903; Margaret Roughhead (French), 1903; Thomas C. Gibson, 1904; Roger G. McDowall, 1904; Herbert J. Paton, 1904; John R. Scott, 1904; Jean Stewart (German) 1904; Mary Hunter (French), 1904; Alexander R. Brown, 1905; Helen B. S. Lennox, 1905; Ruth E. Marwick, 1905; James Porter, 1905; Nettie H. Stein (German), 1905; Isabella Davidson (French), 1905.

COWAN BURSARIES (AYR ACADEMY) (*Arts*).—These Bursaries were founded by the late David Cowan, Esq., of Auchendrane, who bequeathed to the Directors of the Ayr Academy the sum of £2,000, to be invested and held by them in trust, and the annual income thereof applied as Bursaries, to promote the education of two students, one at each of the Universities of Edinburgh and Glasgow, who should have received their previous education, or part of it, at Ayr Academy. These Bursaries are now administered by the "Ayr Educational Trust." Under Scheme 328, Section 26, of the Educational Endowments (Scotland) Commission, approved by Her Majesty in Council on 8th February, 1890, the Governors are instructed to apply an annual sum of not less than £80 in

¹ Vacant through lapse of time.

establishing Bursaries for University education, to be called the Cowan Bursaries, each of the yearly value of not less than £20 nor more than £30. These Bursaries are awarded by competitive examination among those who have been pupils in the Ayr Academy for at least two years before the date of examination, and only those are eligible for appointment who pass the Preliminary Examination occurring first after the termination of their Academy course ; unless it can be shown to the satisfaction of the Governors that any student was unavoidably prevented by illness or other necessary cause from appearing at the Examination first occurring, in which case the Governors reserve to themselves the power to allow such students, should they so decide, to compete at the next following examination. The Governors have resolved to award them alternately to students of Glasgow and Edinburgh Universities. The Bursaries are tenable for three years, the total value of each being £80, payable by instalments of £30 per annum for the first two years, and £20 for the third year. No student who has gained a Cowan Bursary shall hold along with it any other Bursary or Scholarship which either singly or in combination exceeds the amount of £10 per annum, without the consent of the Governors. On a vacancy, intending candidates must send in their names and addresses to the clerk and treasurer, Mr. John Douglas, Wellington Chambers, Ayr, before the first day of September ; and the Senate of the University of Glasgow undertakes the examination of candidates who offer themselves for the Bursary to be held at this University.

Bursars—John W. T. Dickie (three years), 1904 ; John T. Black (one year), 1905.

CRAIG BURSARY (*Arts*).—Founded by Mr. John Craig, merchant in Glasgow, in 1697, for students in Philosophy. Tenable for four years. The preference to kindred of Founder, and students of the name of Craig, was cancelled by Ordinance No. 57 of the Universities Commission (1889). Value, £8 6s. 8d. per annum, increased by the Patrons in 1880 to £25. Appointment by the Merchants' House. Applications to be lodged with W. H. Hill, LL.D., Clerk to the Merchants' House, on or before 1st September of the year in which a vacancy occurs.

Bursar—¹Adam W. Burnet, 1902.

ARCHIBALD CRAIG BURSARY (*Arts*).—The Rev. Archibald Craig, some time minister of the Free Church at Dalton, thereafter residing at Eaglesham, who died on 10th March, 1873, by his Will, dated 4th March, 1873, bequeathed a sum which, with accretions, amounted in 1884 to £250, to be devoted to the foundation of a Bursary in the University of Glasgow. The Trustees of the Bursary Fund are—the Minister for the time being of the Parish of Eaglesham, the Minister for the time being of the United Presbyterian Church,

¹Vacant through lapse of time.

Newton-Mearns, and certain other gentlemen. The Bursary was founded in 1884. It is open to competition, at the annual Bursary Examination, to all students entering on the first session of attendance at the University, who are natives of the parishes of Eaglesham or Mearns, or who for two consecutive years have attended school in either of said parishes; is awarded by the Senate in accordance with the result of that examination; and is tenable for the first two years of such student's attendance at the University. The Bursary is payable at the close of the winter session. Should the Bursary be in abeyance during any session or sessions, from failure of students falling under the above description, the accumulation may, in the discretion of the trustees, be applied to the increase of the Bursary in any subsequent session or sessions, or may be added to the capital fund.

Bursar—¹ Matthew Montgomery, 1904.

CRAWFURD AND BROWN BURSARY (*Arts*).—The Crawford or Bishop's Bursary was founded by Captain Thomas Crawford of Jordahill in 1576, and was appropriated to a student in Languages. It was tenable for four years, the value being a chaldar of meal. The Patrons were the Principal and the Professors of the University. The foundation was remodelled by ordinance of the Universities Commission, dated 7th June, 1862. The Brown Bursary was founded in 1697 by Colonel Brown of Maryland. It was tenable for four years. The annual value was £5, increased in 1880 to £6 13s. 4d. by an addition from the Students' Bursary Fund. This Bursary, being also in the patronage of the Principal and Professors, was combined with the Crawford Bursary by Ordinance No. 81 of the Universities Commission (1889), the joint-bursary to be called the Crawford and Brown Bursary. The preference as to kindred attaching to the Brown Bursary was abolished. The Crawford and Brown Bursary is tenable for four years, the annual value being £19 13s. 4d. If a bursar graduate at the end of three years, he shall only retain his Bursary during the fourth year of tenure, if he shall engage in a course of study approved by the Senate in subjects included in the curriculum for Degrees in Arts or in Pure Science. In other respects the provisions of Ordinance No. 57 apply to this Bursary.

Bursar—Wallace M. Conley, 1904.

ANDREW CUNNINGHAME BURSARIES (*Law*).—Mr. Andrew Cunningham, Town Clerk Depute of Glasgow, who died in 1886, bequeathed to the University, free of legacy duty, £5000, for the purpose of completing the tower, and also £350, the annual revenue of which was to be applied in purchasing a gold medal as a prize in the class

¹ Vacant through lapse of time.

of Mathematics. He also bequeathed to the Senate £2000 for founding two Bursaries in connection with the Scots Law and Conveyancing Classes. The following regulations were adopted by the Senate on 6th April, 1905 :

1. The Bursaries shall be of equal value, and tenable for one year.

2. One Bursary shall be awarded on the report of the Professor to the best student in the Class of Scots Law, and one Bursary shall be awarded on the report of the Professor to the best student in the Class of Conveyancing.

3. The Bursaries may be held along with any other Bursary or Prize.

4. The Bursaries shall be awarded at the close of the winter session and shall be payable at the usual times of payment in the academic year next following, on production of certificates showing that the Bursars are attending some class or classes in the Faculty of Law not attended in a previous year : Provided that the minimum attendance certified be in one class having eighty lectures or in two classes each having forty lectures.

Under these regulations appointments to both Bursaries will be made in March or April, 1907.

Bursar—William Pirie (Conveyancing), 1906.

DONALD CUTHBERTSON BURSARY (*Science*).—Founded in 1900 by Sir John Neilson Cuthbertson, LL.D., and his son Thomas William Cuthbertson, M.A., Trustees of Donald Cuthbertson, LL.B., Accountant in Glasgow, who died on 8th December, 1864. The Bursary Fund amounted to £1,000, being the accumulated revenue and principal of £500 out of the residue of the Testator's estate. After the death of Sir John on 26th January, 1905, his son having predeceased him on 7th May, 1904, the administration of the Fund and Bursary passed, in terms of the Deed of Foundation, to the University Court. The regulations fixed and adopted by the Trustees are to continue in force, and are *inter alia* the following :—

1. The Bursary shall be awarded to a student entering on his course with a view to graduate as B.Sc. in Pure Science, account being taken of the proficiency he has shown in passing the Science Preliminary Examination. 2. The Bursary shall be tenable for a period of three years, provided the Bursar continue his attendance on classes in the University during that period. The present annual value is £32. (Vacant.)

DAVIDSON BURSARIES (*One in Arts and one in Medicine*).—Two in number, founded in 1881, in terms of the Trust Disposition and Settlement of Mrs. Eliza Davidson, who bequeathed £2,000 for that purpose, the one bursary being in memory of her husband, John Davidson, surgeon, Newmilns, and the other in memory of her son, Francis John Ferguson Davidson. A preference is given, *ceteris*

paribus, to the Founder's relatives, and to young men natives of the parishes of Muirkirk, Dalserf, Lesmahagow, and Loudon. One of the Bursaries is open to competition to students of the first or second year in the Faculty of Arts, and is tenable for three years, but the second moiety of the third year's Bursary is not payable until the bursar shall have passed the examinations in four subjects taken out of at least two Departments for the Degree in Arts. The other Bursary, also tenable for three years, is awarded to the medical student who stands first in the First Professional Examination, provided that his attendance at the classes has not exceeded the requirements of the Ordinance. The present annual value of each is £32.

Bursar in Arts—¹James Carmichael, 1903.

Bursar in Medicine—Robert R. Bow, 1904.

DENNY BURSARIES (*Any Faculty*).—Four in number, founded in 1875, by the late Peter Denny, LL.D., engineer and shipbuilder, Dumbarton. Value, not less than £30 per annum each, and tenable for four years. Open for competition to all students entering the University who are not under fourteen years of age, and who have been pupils in regular attendance at the Dumbarton Burgh Academy for at least two years, one of which must be immediately preceding the date of such entry. One of the Bursaries will be competed for at the beginning of next session. The examination will be in the same subjects and at the same time as the examination for the other competition Bursaries. The Trustees are Mr. Peter Denny and Mr. Leslie Denny, nominated in 1896 by the Sheriff of Dumbartonshire, the Principal and Professors, and one of the four Assessors of the General Council in the University Court appointed by the four Assessors, or a majority of them, in accordance with the provisions of Ordinance No. 91 of the Universities Commission (1889).

Bursars—¹David B. Smith, 1902; Robert W. Roxburgh, 1903; Harvey H. Montgomerie, 1904; William M. Balfour, 1905.

GLASGOW DUMFRIESSHIRE SOCIETY'S BURSARIES (*Any Faculty*).—Two in number, the one founded in 1874 and the other in 1876. They are in value £15 per annum each, are tenable for four years, and consist of the annual proceeds of a sum subscribed by members of the Glasgow Dumfriesshire Society and invested for the establishment of Bursaries in Glasgow University. The Bursaries are open to first and second year's students, between the ages of 14 and 27, who are either descendants of members of the Glasgow Dumfriesshire Society, or natives of Dumfriesshire, or sons of natives resident in Glasgow, whose circumstances render the aid of a Bursary necessary or desirable. Application to be made to the Secretary, Mr. Francis Stoddart, 212 St. Vincent Street, Glasgow, not later than

¹ Vacant through lapse of time.

1st September of the year in which a vacancy occurs. There are no bursaries at present.

DUNCAN'S BUTE BURSARIES (*Arts*).—Founded in 1875 for the benefit of natives of the island of Bute, by Mr. James Duncan of Valparaiso, and afterwards of Rothesay, who by his Will of date 19th October, 1874, bequeathed £2,000 for this purpose. The Trustees and Patrons are the Principal, the Professor of Mathematics, the Professor of Natural Philosophy, and the Provost of Rothesay, all for the time being. Candidates must be natives of the island of Bute, and must be entering on their first or second session in the Faculty of Arts at the University. The Bursaries are two in number, tenable for four years; but the Patrons may in each case continue the Bursary for a fifth year to assist a student who may have been assiduous in his Academical studies, in private study, or in Continental travel, or other pursuits conducive to relaxation, combined with enlargement of his experience of men and things. The examination is in the same subjects and at the same time as the examination for the other competition Bursaries. There is a preference, *ceteris paribus*, to the name of Duncan, in such degree as the Patrons shall determine; in other cases of equality the Bursary may be divided. Present annual value, £35 to each Bursar. On 28th October, 1897, the Patrons made a by-law declaring that it should not be competent for any one appointed after that date to a Duncan's Bute Bursary to hold any other Bursary or Scholarship concurrently with it.

Bursar—William C. Cameron, 1905.

DUNDONALD BURSARIES (*Eight in Arts and Six in Theology*).—In 1672, William, Earl of Dundonald, founded seven Bursaries—four in Philosophy and three in Divinity.

In 1858 the surplus funds of this foundation having greatly accumulated, an Act of Parliament was obtained, authorizing an increase in the number of Bursars, but providing that the total number of Bursars in Philosophy shall, at all times, bear to the number of Bursars in Divinity the proportion of four to three, as nearly as may be. The Bursaries are now fourteen in number—eight in Philosophy and six in Divinity.

The Bursaries were further regulated by Ordinance No. 94 of the Universities Commission (1889). The Bursaries in Arts are tenable for four years, but if a bursar graduate at the end of three years, he shall only retain his Bursary for the fourth year of tenure, if he engage in a course of study approved by the Senate in subjects included in the curriculum for Degrees in Arts or in Pure Science. The Bursaries in Divinity are tenable for three years, and no longer. A student cannot be appointed to a Dundonald Bursary in Divinity unless he has passed all the examinations required for graduation in Arts. In other respects the provisions of Ordinance No. 57

apply to all the Bursaries on this Foundation. The Bursars in Arts receive £40 each per annum, and those in Divinity £41 2s. 6d. The patronage lies with the Trustees of the late Duke of Hamilton, and is exercised by their Commissioner, George Dalziel, Esq., 66 Queen Street, Edinburgh, to whom applications should be sent on or before the first of September. One appointment in Arts and one in Divinity will be made for next session.

Bursars in Philosophy—¹Douglas H. Wilson, 1902; ¹Joseph Davidson, 1902; George Blair, 1903; James R. Brown, 1904; John Brown, 1905.

Bursars in Divinity—¹William R. Wiseman, M.A., 1903; Matthew Biggar, M.A., 1904; Robert S. Armstrong, M.A., 1905.

JAMES EWING ENTRANCE BURSARIES (*Arts*).—Four in number, founded in 1879 by the Merchants' House of Glasgow in accordance with the Deed of Endowment of the late Mr. James Ewing of Strathleven. The Directors resolved to apply annually £80 of the income of his legacy of £10,000 for educating, training, and settling in business the sons of Glasgow merchants in entrance Bursaries of £20 each. The Bursaries are tenable for four years by students giving regular attendance on classes in the Faculty of Arts. Open to first year's students. The appointments to the Bursaries will be made in accordance with the annual Bursary competition at the commencement of the session; candidates to be qualified as above. Applications to be lodged with Wm. H. Hill, LL.D., Clerk of the Merchants' House, on or before 1st September, in each year. (One vacancy.)

Bursars. ¹Charles McNeil, 1902; George Harvie, 1903; Robert C. Davie, 1904.

JAMES FERGUSON BURSARIES (*Theology, Law, Medicine, or Department of Engineering Science*).—Two in number, founded in 1877, under provision of the Trust Disposition and Settlement of the late James Ferguson, Esq., of Wiston, and consisting of the annual proceeds of a sum of £3,600. The Bursaries are now each of the annual value of £95, and are tenable in the University of Glasgow for two years in any of the three Faculties of Divinity, Law, or Medicine, or in the Department of Engineering Science. The Bursaries are awarded for special proficiency in Arts studies, according to the following rotation, viz.:—In November, 1878, and thereafter triennially, in Mental Philosophy, together with English Literature; in November, 1879, and thereafter triennially, in Mathematics and Natural Philosophy; in November, 1880, and thereafter triennially, in Classical Literature. The Examination is the same as that for honours in the Groups of Classics, Mental Philosophy, and Mathematics and Natural Philosophy respectively (with the addition in the case of the Group of Mental Philosophy of a paper on English

¹ Vacant through lapse of time.

Literature), at the annual Examination for Degrees in October. Candidates must have completed the course of attendance required for admission to examination in the corresponding Group for the Degree of M.A. with Honours. Each Bursar must pursue the course of study for such Degree in Divinity, Law, Medicine, or Engineering Science, as he may, with approval of the Senate, select. In the event of a successful candidate not having completed attendance on the Arts classes necessary to qualify for the Degree of M.A., he shall be at liberty, without forfeiting his right to the Bursary, to continue his studies in Arts for two years, in order that he may complete his qualifications for graduation; but no part of the Bursary shall become payable until he has selected and entered upon a course of study in one of the three Faculties above mentioned, viz.:—Divinity, Law, or Medicine, or in the Department of Engineering Science. While the Bursary is tenable for two years of such course, the Bursar must continue his attendance on classes beyond the two years, if this be necessary for graduation or for receiving the Certificate of Proficiency in Engineering Science. The Bursar shall not receive payment of any half-yearly Bursar without such evidence as the Senate may require that he is faithfully pursuing the selected course, and shall not receive payment of the fourth half-yearly Bursar until he has graduated or received the Certificate of Proficiency in Engineering. Unless a candidate comes up to at least the standard of Second Class Honours, the Senate shall not be bound to award the Bursary. There is a preference, *ceteris paribus*, to young men natives of the parishes of Lesmahagow or Muirkirk, or the province of Pictou, Nova Scotia, and also to young men of the name of Ferguson or Weir, or to descendants and relatives of the founder.

Candidates for the Bursary to be competed for in 1906 will be examined in Mathematics and Natural Philosophy along with the examinations on these subjects for the Degree of M.A. with Honours. Names to be given in to the Assistant Clerk (Matriculation Office) not later than 19th September.

Bursars—Eric J. Roberts (Mental Philosophy), 1902; ¹James C. M. Fairlie (Classics), 1904.

FORFAR BURSARIES (*Arts*).—Founded by the Countess of Forfar in 1737. The foundation was remodelled by the Universities Commission (1858), by Ordinance of 31st May, 1862, and further regulated by Ordinance No. 79 of the Universities Commission (1889) of date 15th February, 1895. There are now five Forfar Bursaries in the gift of the Senate: the holder of each to receive £36, if the funds allow. These Bursaries are open for competition to all students entering the first or second session of attendance at the University. They are tenable for four years, subject to the

¹ Vacant through lapse of time.

condition that the bursar shall proceed through the curriculum in Arts, and shall pass the examinations for the Degree of M.A. If a bursar graduate at the end of three years, he shall only retain his Bursary during the fourth year of tenure if he shall engage in a course of study approved by the Senate in subjects included in the curriculum for Degrees in Arts or in Pure Science. In other respects the provisions of Ordinance No. 57 of the Universities Commission (1889) apply to the Forfar Bursaries. The Senate, acting under Section XIII. of the said Ordinance, have resolved to award four of these bursaries in respect of exceptional distinction in Classics, viz., one each year to a student of the first year who, having passed the Arts Preliminary, has gained the highest marks in Latin and Greek in the Bursary examination and has not obtained a bursary for general excellence.

Bursars—¹William G. Waddell (1905), 1902; Mungo T. Archibald (Classics), 1903; Robert Gibson (Classics), 1904; Bryce K. N. Wyllie (Classics), 1905.

FORREST BURSARIES (*Any Faculty*).—Founded by Mr. William Forrest of Easter Meadowhead, Drumgelloch, and Meadowside, by Deed of Mortification of date 6th March, 1858. The Trust was reconstituted in 1886, under a Scheme of the Educational Endowments Commission. The Bursaries are five in number, each of the annual value of £22, and tenable at the University of Glasgow for such number of years, not exceeding five, as the Governors may determine. The Bursaries are awarded by competitive examination among young men who require aid in obtaining a University education, and who have been pupils in public or State-aided schools within the parishes of New Monkland, Slamannan, and Shotts, or who are natives of said parishes. Bursars cannot hold another Bursary, must prosecute a course for some degree, and attend at least two classes each session.

Governors—The Provost of Airdrie, the ministers of the parishes of New Monkland, Airdrie, and Clarkston, one representative from each of the School Boards of Airdrie and Clarkston, and one from the School Boards of Slamannan and Shotts alternately, and one appointed by the Sheriff of Lanarkshire. Secretary, Mr. G. B. Motherwell, Town Clerk, Airdrie. (One or probably two vacancies.)

Bursars—John Drummond, 1903; Alexander J. D. McDonald, 1903; Peter C. Millar, 1904; Alexander Lindsay, 1904; Archibald Gardner, 1905.

FORRESTER BURSARY (*Arts*).—Founded in 1901 by the Trustees of the late James Forrester, merchant in Airdrie, in accordance with the instructions contained in his Trust Disposition and Settlement. The Trustees are the patrons. The Bursary, which is

¹ Vacant through lapse of time.

of the annual value of £22 to £25, and tenable for three years, is open to competitors of either sex, born in the parish of Dunblane or Lecropt, and requiring assistance to enter the University. It will be awarded after public examination of the candidates at the Bursary Competition in connection with the Faculty of Arts in the University of Glasgow. It shall not be held by any Bursar along with any other Bursary or Scholarship whatsoever. If two candidates are found to be equal in merit, the Trustees may divide the Bursary between them. When no candidate of sufficient merit makes application, the Bursary will lapse until the following year. Whenever the Bursary remains vacant for a year or years, the income accumulated will go to increase the Benefit of the first successful applicant, the accumulated interest being spread over the three years of tenure. When a vacancy occurs, applications should be lodged with Mr. Alexander B. Barty, Writer, Dunblane, on or before 1st September.

Bursar—Elizabeth S. Bruce, 1904.

FOUNDATION BURSARIES (*Arts*).—These Bursaries were founded by James VI., in 1577, for students in Languages and Philosophy, and were originally four in number. By ordinance of the Universities Commission (1858) of date 7th June, 1862, these Bursaries were remodelled, and were further regulated by Ordinance No. 84 of the Universities Commission (1889) of date 15th February, 1895. Under the new scheme there are two Foundation Bursaries, the holder of each to receive £20 per annum. They are open for competition to all students entering the first session of attendance at the University, and are tenable for four years. The class attendance of the Foundation bursars is regulated by Ordinance No. 57, Sec. III. The Senate, acting under Section XIII. of the said Ordinance, have resolved to award these bursaries in respect of exceptional distinction in English, viz., one bursary in alternate years to a student of the first year who, having passed the Arts Preliminary, has gained the highest marks in English in the Bursary examination and has not obtained a bursary for general excellence. If a bursar graduate at the end of three years, he shall only retain his Bursary during the fourth year of tenure if he shall engage in a course of study approved by the Senate in subjects included in the curriculum for Degrees in Arts or in Pure Science.

Bursars—James Malcolmson (English), 1904; Donald C. Smith (English), 1905.

FRANCO-SCOTTISH SOCIETY'S TRAVELLING BURSARIES (*Arts*).—The Scottish Branch of the Society offers for 1907 two Travelling Bursaries of £30 each for competition among Scottish students. The examination will be held simultaneously in the four Scottish Universities on 10th March, 1907. Candidates must send their applications,

names, addresses, and certificates of attendance in at least one of the University French Classes, during one or both of the sessions 1905-6 and 1906-7 (accompanied by a stamped and addressed envelope), to J. W. D. Kirkland, Esq., S.S.C., Hon. Treasurer, 20 George Street, Edinburgh, between 19th February and 3rd March, 1907, only, and state at which of the four Universities they desire to be examined. Candidates from the Training Colleges, if specially recommended by the respective Rectors, will also be admitted to the examination, although they have not attended University Classes. The Bursars are required to study French in France for at least three months during the currency of the year in which the Bursaries have been gained, to the satisfaction of the Society.

The competition is open to those candidates only who hold no other Scholarship, Bursary, or Grant for the purpose of enabling them to study French.

FULLARTON OF OVERTON BURSARIES (*Arts*).—By Deed of Mortification and Constitution dated 22nd December, 1877, the Executors of the late John Fullarton, Esq., of Overton, West Kilbride, Ayrshire, in pursuance of his Trust Disposition and Settlement and Codicils, assigned to the Principal and Professors of Glasgow University, as Patrons, the residue of his estate, amounting to £2,604 17s. 7d., for the purpose of founding five Bursaries, more or less, each of the annual value of at least £10, but not exceeding £30. The present annual value to each bursar is £22. The Bursaries are tenable for two years by students in Arts under 25 years of age, belonging to or resident in the district of Cunninghame, in Ayrshire, children of parents whose means and social position are not above those of tradesmen, small farmers, or shopkeepers, or others who may be struggling to secure their better education, and are by themselves, or with such assistance as they may be able to get from their parents or relations, unable to provide for the expenses of a University education. The Bursaries are awarded by competitive examination in Latin, Elementary Mathematics, and English; but no candidate is eligible who has attended any University for more than one session. A Bursary may be divided between two candidates of equal or nearly equal merit, but as between a candidate who has not previously attended any University and a candidate who has so attended, the former is preferred. A Bursar may attend each session one or more of the classes in the Faculty of Arts, the selection of classes being left to his own option. Any accumulations through vacancies are added to the capital sum. Candidates are required to produce evidence of age.

Bursars—¹Andrew Boyd, 1904; ¹John S. Boyd, 1904; ¹Alexander T. R. Yuille, 1904; Robert Thomson, 1905; David Wilson, 1905.

¹ Vacant through lapse of time.

WILLIAM GARDINER BURSARIES (*Arts, Medicine*). — William Gardiner, M.D., of Ashton-under-Lyne, by his Settlement, dated 27th September, 1897, directed his Trustees to pay over to the University Court the sum of £1000, free of legacy duty, for the purpose of founding one or more Scholarships, Bursarships, or Exhibitions, to be devoted to such objects and in such manner as the Court should think fit, preference being given to students of Chemistry, Physiology, and Physics, French and German, and, so far as practicable, to sons of medical men, lawyers, and teachers.

The following regulations were approved by the University Court on 4th October, 1900:—

1. The Bursaries shall be two in number, equal in value, and each tenable for two years.

2. One Bursary shall belong to the Faculty of Medicine, and shall be awarded after the Autumn Professional Examinations in Medicine to the candidate who in the year in which the bursary is open has passed in Physiology of the second professional examination, and whose aggregate of marks in that subject and in Chemistry and Physics of the first professional examination, is the highest.

3. The other Bursary shall belong to the Faculty of Arts, and shall be awarded to the student who obtains the highest marks in French and German as subjects of the General Bursary examination in the year in which the Bursary is open, provided that it shall be in the power of the Senate to award the bursary for decided proficiency shown by a candidate in one of the said languages. The holder of this bursary must attend the French class or the German class in the University, and pass the examination in one or other of these subjects required for graduation in Arts. The second moiety of the second year's Bursary shall not be paid until the Bursar shall have passed this examination.

4. Either of the William Gardiner Bursaries may be held along with any other Bursary in the University, if the regulations of that other Bursary permit.

5. The Bursaries shall be open to both men and women, effect being given, *ceteris paribus*, to the preference expressed in the Will of Dr. Gardiner for sons of medical men, lawyers, and teachers.

The present annual value of each is £14.

Bursars—Isabella F. Dove (Arts), 1905; Ralph M. F. Picken (Med.), 1905.

GARTMORE BURSARY (*Arts*).—In accordance with the directions of the Founder of the Gartmore Medal (see p. 406), the Universities Commission (1889), by Ordinance No. 98, founded this Bursary, a sufficient capital having accumulated from the surpluses of the Foundation. It is open by competition to all students entering on their first year of attendance on a course for graduation in Arts, and

is tenable for three years. Value, £21 per annum. In other respects the provisions of Ordinance No. 57 apply to the Gartmore Bursary.

Bursar—¹ Charles Cameron, 1903.

GENERAL COUNCIL BURSARIES (*Arts*).—Under a scheme originated by the late Mr. David Hannay, Clerk to the General Council, a sum of about £500 (Fund No. I.) was raised by subscription among the members of Council for the foundation of Bursaries to be held for three years, and open to competition to first and second year's students in Arts. This fund has now been exhausted. In addition, a sum of £2,382 2s. (Fund No. II.) was raised to form the nucleus of a permanent General Council Bursaries Fund, and invested in the names of Trustees. Of this sum £1,000 is due to the liberality of the late Rev. Wm. Park, D.D., minister of Airth, to be applied in memory of his brother, the Rev. John Park, D.D., minister of Cadder. With Dr. Park's consent, the income of this sum was appropriated to two General Council Park Bursaries of £20 a-year, open to students of either sex who, having passed the Preliminary Examination in Arts, are about to commence their second year of actual attendance at the University. The General Council Park Bursaries are tenable for two years. The remainder of the free income of the fund is devoted to providing bursaries, called the General Council Bursaries, of such number and of such amount as may from time to time be determined by the Trustees. The General Council Bursaries are open to students of either sex on their first entering the University, and are tenable for three years. No candidate shall obtain a General Council Bursary who shall not have passed the Preliminary Examination in Arts, but it is in the power of the Trustees to admit to a General Council Bursary, a candidate who has passed in at least three subjects of the Preliminary Examination on condition that the bursary shall not be retained unless the bursar passes in all the subjects not later than the second Preliminary Examination held after the time of admission. In 1903 and triennially thereafter (1906) one General Council Bursary shall be awarded in respect of special distinction in Dynamics to the student of the first year who, having passed the Arts Preliminary, has gained the highest marks in Dynamics in the Bursary examination, and has not obtained a bursary for general excellence.

Bursars—¹ Edward J. A. Stewart, 1904 (Park); Mary S. Anderson, 1905; Frederick A. Stewart, 1905 (Park).

JOHN GIBSON BURSARIES (*Any Faculty*).—Founded in 1877 by Miss Jane Gibson, in memory of her father, John Gibson of Oakbank and Johnstone, merchant in Glasgow. The Bursaries, which may be given to one student, or at most two, consist of the annual proceeds of £1,000. The administration is vested in trustees, who

¹ Vacant through lapse of time.

have great discretionary powers as to the conditions on which the Bursaries may be held. Their subsisting resolution is to award the Bursary to a Medical student entering on the third year of his course, and that it be retainable for three years. When a vacancy occurs applications and relative testimonials are to be lodged not later than 1st October with Messrs. A. J. & A. Graham, 198 West George Street, Glasgow, who will furnish forms of application. (One vacancy.)

Bursar—John M'Vittie, 1904.

DR. THOMAS GIBSON (ROTHESAY) BURSARY (*Medicine*).—Founded in 1893 in terms of the Trust Disposition and Settlement of Misses Christian and Janet Gibson, who bequeathed £1,000, free of legacy duty for that purpose, in memory of their brother. Present annual value, £36. The Bursary is tenable for four years, and is open to any matriculated student of Medicine (male or female) in the University preparing for service as a Medical missionary in connection with the Church of Scotland, who has completed the first professional examination in the year in which the Bursary is open. The Bursary is awarded to the qualified applicant who has obtained the best marks in the said examination; but in the case of an equality of marks between two or more candidates, the Senate may hold a further examination to determine to which of such candidates the Bursary shall be awarded. In the case of a casual vacancy, the Senate may appoint for the remainder of the period of tenure any qualified applicant who has shown diligence and proficiency in the earlier part of the curriculum in Medicine. In the event of the Bursary not being awarded in any year or years from lack of qualified candidates, the Senate may, in any subsequent year, if the funds of the Foundation admit, award an additional Bursary for one or more years, not exceeding four. There is a preference, *cæteris paribus*, to students of the name of Gibson.

Bursar—¹John M'Vittie (one year), 1905.

GILCHRIST BURSARY.—See Howison and Gilchrist, p. 334.

GILHAGIE AND STRUTHERS BURSARY (*Theology*).—The Gilhagie Bursary was founded in 1753 by Agnes Gilhagie, widow of William Somerville, merchant in Glasgow, for a student in Divinity. It was tenable for four years, the annual value being £6 6s. In 1624 the Rev. William Struthers founded two Bursaries, each of the annual value of £6 13s. 4d., for students of Divinity. By Ordinance of the Universities Commission (1858) the two Struthers Bursaries were conjoined into one, tenable for three years, the holder to be M.A., and a student of Divinity. All other restrictions were abolished. By Ordinance No. 82 the Universities Commission (1889) combined the Gilhagie Bursary and the Struthers Bursary into one,

¹ Vacant through lapse of time.

called the Gilhagie and Struthers Bursary. The patrons of the joint-bursary are the Magistrates, Town Council, and Ministers of Glasgow, who may present any person without preference as to name, provided that he be a Master of Arts of a Scottish University. The Bursary is tenable for three years, and no longer, subject to the condition that the bursar shall during that period give regular attendance as a student of Theology in the University of Glasgow. When a vacancy occurs, applications are to be lodged with the Town Clerk, City Chambers, not later than 1st September. (Vacant.)

GLASGOW CITY EDUCATIONAL ENDOWMENTS BURSARIES(*Arts, etc.*).—Under scheme 10, section 31, of the Educational Endowments (Scotland) Commission, approved by Her Majesty in Council, on 19th May, 1885, the Governors of the Glasgow City Endowments Board are instructed to apply the annual sum of £500 in establishing Bursaries at the University of Glasgow. Each Bursary is of the yearly value of £25. One half of these Bursaries are to be awarded among the King's Scholars at Training Colleges who have attended two years at the University of Glasgow, on the report of the Board of Examiners appointed by the Scotch Education Department. Every King's Scholar obtaining such Bursary shall be taken bound to complete his curriculum for a degree in Arts or Science during the time he holds the Bursary, and thereafter to submit himself for examination for such degree. The other half of the Bursaries are to be awarded by competitive examination among those who have attended public or State-aided schools in Glasgow, and who require aid in obtaining a University education. They are tenable for four years. Forms of application may be had from the Secretary of the Board—Mr. W. H. Macdonald, Hutchesons' Buildings, Ingram Street—and should be lodged with him on or before the 1st day of September in each year. The names of candidates who are found to possess the prescribed qualifications will be sent by him to the Clerk of Senate that they may be entered at the University competition for Bursaries for the first year. The Bursaries will be awarded to those candidates highest in order of merit who fail to win a Bursary at the general competition. In 1905 five King's Scholars and two other Bursars will be appointed.

Bursars—¹James M'Kelvie, 1902; ¹Francis M. Smith, 1902; Peter R. M'Naught, 1903; Margaret B. Moir, 1903; Douglas D. Robertson, 1903; Eric D. Macgregor, 1904; Robert F. Rattray, 1904; John S. Anderson, 1905; Thomas S. Campbell, 1905; Catherine Craig, 1905.

King's Scholars—¹John B. Black, 1904; ¹Elizabeth A. Forrest, 1904; ¹Helen A. Mitchell, 1904; ¹James Paul, 1904; ¹Andrew Templeton, 1904; Annie P. Irvine, M.A., 1905; Christina C. MacEwen, M.A., 1905; Annie Thomson, M.A., 1905; David B. Meek, 1905; James Ritchie, 1905.

¹ Vacant through lapse of time.

GEORGE GRANT BURSARY (Arts).—Founded in 1885 by Miss Susan Smith Grant of West Thorn, Lauder Road, Edinburgh, in memory of her father, George Grant, Esq., cotton spinner, Mile-End, Glasgow. Miss Grant assigned and conveyed to the Senate the sum of £1,200 in trust, to be applied in all time coming for providing one Bursary in connection with the Faculty of Arts. Miss Grant retains the right of nomination to the Bursary during her lifetime, but has provided that in the event of her failing or declining to nominate, and in all cases after her death, the Bursar shall be determined by competitive examination of first year students who are entering on a three or four years' course of study, and the Bursary shall be tenable for three or four years accordingly. On the Bursary falling vacant otherwise than by lapse of time, an appointment may be made for the remainder of the term, or for the full period after competition. The Bursar is required to graduate in Arts, and before payment of the second moiety of the last year's Bursary he must produce evidence that he has taken his degree, or that he has passed all the examinations necessary for graduation. Any accumulations from vacancies or otherwise are to be added to the capital sum.

Bursar—¹Margaret M. M. Farquharson (1905), 1902.

GEORGE GRANT, JUNIOR, BURSARY (Arts).—Founded in 1885 by Mrs. Agnes Grant or Mair, wife of the Rev. John Mair, D.D., minister of the parish of South Deau, Roxburghshire, in memory of her brother, the late George Grant, junior, cotton manufacturer, Mile-End, Glasgow. Mrs. Mair, with the advice and consent of her husband as her curator and administrator-in-law, and for his interest in the premises, assigned and disposed to the Senate the sum of £1,200 in trust, to be applied by them in all time coming for providing one Bursary in connection with the Faculty of Arts. Mrs. Mair reserved to herself during her lifetime, and thereafter to her husband, should he survive her, the right to nominate to the Bursary, and to fix the classes to be attended by the Bursar and the period of his tenure. Mrs. Mair died on 27th November, 1900, and Dr. Mair on 27th January, 1902. The Bursary is tenable for four years, and the Bursar is selected by competitive examination of first year's students. In the event of a vacancy occurring otherwise than by lapse of time an appointment may be made for the remainder of the term, or for the full period after competition. The Bursar is required to graduate in Arts, and before payment of the second moiety of the last year's Bursary must produce evidence that he has taken the degree, or that he has passed all the examinations necessary for graduation. Any accumulations through vacancies or otherwise are to be added to the capital sum.

Bursar—Henry I. Cunningham, 1903.

¹ Vacant through lapse of time.

HAMILTON BURSARIES (*Three in Arts, and Three in Theology*).—These Bursaries, now six in number, were founded by Anne, Duchess of Hamilton, in 1694. They were regulated by Act of Parliament, 1758, and further regulated by Ordinance No. 96 of the Universities Commission (1889). There are three Hamilton Bursaries in the Faculty of Arts, and three in the Faculty of Divinity, and each of them is tenable for three years, and no longer. The bursars in the Faculty of Arts shall attend such classes qualifying for graduation in Arts, and in such order as may be approved by the Senate. In other respects the provisions of Ordinance No. 57 apply to the Bursaries on this Foundation. The bursars in Arts receive £20, those in Divinity £25 per annum each, should the state of the funds permit. The patronage lies with the Trustees of the late Duke of Hamilton, and is exercised by their Commissioner, George Dalziel, Esq., 66 Queen Street, Edinburgh, to whom applications should be sent on or before the first of September.

Bursars in Arts—¹James Williamson, 1903; Henry Leitch, 1904; John C. Kinnear, 1905.

Bursars in Theology—¹John Martin, M.A., 1903; John M. Woodburn, 1904; Donald C. B. Gordon, 1905.

HAMILTON EDUCATIONAL TRUST BURSARIES (*Arts*).—Under scheme 39, section 28, of the Educational Endowments (Scotland) Commission, approved by Her Majesty in Council on 13th May, 1887, the Governors of Hamilton Educational Trust are instructed to apply a sum, not less than £50 yearly, in providing University or Technical College Bursaries. These Bursaries, each of the yearly value of £20, and tenable for three years, are open to be competed for by pupils attending public or State-aided schools in the burgh and parish of Hamilton, who require aid in obtaining a University or higher education. Applications to be lodged with Patrick Keith, Esq., Hamilton, Clerk of the Trust, on or before the first day of September. (One vacancy.)

Bursars—Margaret Blair, 1903; David F. Steele, 1904; Robert M'D. Walker, 1905.

HANNAY BURSARIES (*Arts*).—Three in number, founded in 1865 by the late Mr. Anthony Hannay, merchant, Glasgow, in memory of his deceased wife. To be awarded to young men, not under fourteen and not above nineteen years of age, who are about to commence their studies in the Arts classes, with a view to the Holy Ministry in connection with any of the Evangelical Religious Denominations in Scotland, and who shall engage to attend during each of the first three years of the curriculum not fewer than two classes. The principal qualifications of those to be selected are good moral character, promising talent, a fair preliminary education, and a want or deficiency in the necessary pecuniary means for pursuing a Uni-

¹ Vacant through lapse of time.

versity education. Candidates for these Bursaries are required to submit themselves to the annual Bursary Examination at the commencement of the Winter Session of the University of Glasgow, or such other examination as the trustees may appoint; but the result of said examination shall only be taken as one of the tests in judging of the merits of the applicants. The Bursaries to be bestowed for three years—one to be given each year. Value, about £15 per annum each. The appointment is vested in the Principal, the Dean of the Faculty of Procurators in Glasgow, and the President of the Faculty of Physicians and Surgeons in Glasgow. Applications to be made to Mr. Robert Brodie, 77 St. Vincent Street, and also to the Assistant Clerk (Matriculation Office) not later than 1st September. (One vacancy).

Bursars—¹William Stevely, 1903; Neil W. Wilson, 1905.

HASTIE BURSARIES (*One in Arts and Two in Theology*).—The Rev. Mr. Hastie, by Deed of Mortification dated 5th September, 1707, founded a Bursary for a student in this University, which was first awarded in 1718. By an addition afterwards made to the foundation, the number of Bursaries was increased to three, two in Divinity and one in Philosophy.

The Universities Commission (1858), in an Ordinance of date 31st May, 1862, made regulations for these Bursaries, and further regulations have been made by the Commissioners (1889) in Ordinance No. 90. There are now three Bursaries on this Foundation, each £26 in value—one in Arts and two in Theology. The Bursary in Arts is open by competition to all students entering on their first session of attendance in the Faculty of Arts, and is tenable for four years, but if a student graduate at the end of three years, he shall only retain his Bursary for the fourth year of tenure if he shall engage in a course of study approved by the Senate in subjects included in the curriculum for Degrees in Arts or in Pure Science. The Bursaries in Divinity are open by competition to all students who are Masters of Arts, or who have passed all the examinations necessary for graduation in Arts, and who are entering on their first session of attendance in the Faculty of Divinity. They are tenable for three years, and no longer. In other respects the provisions of Ordinance No. 57 of the Universities Commission (1889) apply to all the Hastie Bursaries. The Senate, acting under Section xiii. of the last-mentioned Ordinance, have resolved to award the Hastie Bursary in Arts in respect of exceptional distinction in English, to a student of the first year who, having passed the Arts Preliminary, has gained the highest marks in English in the Bursary Examination, and has not obtained a bursary for general excellence. (A vacancy in Arts and Theology respectively.)

Bursar in Arts—¹James D. Paterson, 1902.

Bursar in Theology—James H. Cockburn, M.A., 1904.

¹ Vacant through lapse of time.

GLASGOW HIGHLAND SOCIETY'S BURSARIES (*Ten in Arts and Eleven in Medicine*).—In 1892 the Managers of the Glasgow Highland Society framed a scheme of Scholarships and Bursaries for students of Highland descent. The scheme includes Scholarships tenable at Secondary or Technical Schools, and Bursaries tenable at the Glasgow and West of Scotland Technical College and at the University. The Bursaries may be held by men or women in a proportion to be determined by the Managers. The University Bursaries in Arts are ten in number, each of the annual value of £20, and tenable for four years in the Faculty of Arts, but the continuance of a Bursary in the second and subsequent years is dependent on the character of the certificates obtained by a Bursar in his classes in the previous year. They are awarded by competition among students of the first year. The Bursaries in Medicine, each of the annual value of £25, are tenable for five years in the University, or any other College approved by the managers. Candidates must pass the preliminary examination of the College at which they desire to attend, and the managers reserve to themselves the right to appoint the most suitable. In 1906 there will probably be two Bursaries in Arts and two in Medicine open to competition. Secretary, Mr. Hugh Brown, Jun., 58 St. Vincent Street.

Bursars in Arts—¹Stewart L. W. Ross, 1902; Isabella M. Ross, 1903; William M'Nicol, 1903; Angus Nicolson, 1904; John Nicolson, 1904; Henrietta H. Duff (three years), 1905; George Scott (three years), 1905.

Bursars in Medicine—¹Murdo M. MacRae, 1901; ¹Neil A. M. Johnson, 1901; Murdo M'Phail, 1902; Robert C. Robertson, 1902; Alexander Mackinnon, 1903; George Macleod, 1904; Angus Millar, 1904; Donald C. Macdonald, 1905; David W. B. F. Campbell, 1905.

HILL BURSARIES (*Arts*).—Two Bursaries of the annual value of not less than £10, nor more than £25 (present value £15). These Bursaries, tenable for three years, shall be awarded on the results of the Bursary Competition of the University of Glasgow, and shall be open to pupils attending the secondary departments of public or State-aided schools in the district of the School Board of the Parish of Govan, who shall be approved by the Governors of Hill's Trust, and whose parents are in such circumstances as to require aid in giving their children higher education. Secretary, John A. Craigie, LL.D., 151 Bath Street, to whom in case of a vacancy application should be made before 1st September.

Bursars—Mary P. Houstoun, 1904; William M. Blackwood, 1904.

HOWISON AND GILCHRIST BURSARY (*Arts*).—In 1613 the Rev. John Howison, Minister of Cambuslang, founded a Bursary for a qualified scholar of honest name and good report, son of a craftsman of

¹ Vacant through lapse of time.

Glasgow. Failing the son of a craftsman of Glasgow, any other qualified scholar might be selected by the Patrons. Mr. John Gilchrist, tailor in Glasgow, founded in 1700 a Bursary in Philosophy for a student, being the son of a tradesman freeman in the burgh of Glasgow, with a preference to the names Gilchrist, Bryce, and Boyd.

By Ordinance No. 89 the Universities Commission (1889) combined these two Bursaries into one, called the Howison and Gilchrist Bursary. The Patrons are the Trades' House of Glasgow, and any person may be presented without restriction as to birth or preference as to name. The Bursary is tenable for four years, but if a bursar graduate at the end of three years, he shall only retain his Bursary during the fourth year of tenure if he shall engage in a course of study approved by the Senate in subjects included in the curriculum for Degrees in Arts or in Pure Science. In other respects the provisions of Ordinance No. 57 apply to this Bursary. Value £10 per annum.

Bursar—Adam B. Mitchell, 1904.

HUTCHESONS' EDUCATIONAL TRUST BURSARIES.—Under Scheme 9, Section 40, of the Educational Endowments (Scotland) Commission, approved by Her Majesty in Council on 5th March, 1885, the Governors of Hutchesons' Educational Trust are instructed to apply an annual sum of not less than £400 in establishing University or Technical College Bursaries. These Bursaries, each of the yearly value of £20, and tenable for four years, are open to be competed for by boys who have attended Hutchesons' Grammar School for at least two years immediately preceding the competition, and completed the curriculum in the Secondary Department. Forms of application may be had from the Secretary of the Trust—Mr. W. H. Macdonald, Hutchesons' Buildings, Ingram Street—and should be lodged with him on or before the first day of September in each year. The names of candidates who are found to possess the prescribed qualification will be sent by him to the Clerk of Senate that they may be entered at the University competition for Bursaries for the first year. The Bursaries will be awarded to those candidates highest in the order of merit who fail to win a Bursary at the general competition. In 1906 five Bursars will be appointed.

Bursars—¹David H. Battersby, 1902; ¹William M. Kerr, 1902; ¹Thomas Sutherland, 1902; ¹James Muir, 1902; James W. Findlay, 1903; Joseph John Graham, 1903; Ernest W. Russell, 1903; Robert Stephen, 1904; Douglas A. W. Berry, 1904; Samuel W. Hutcheon, 1904; George Millar, 1904; David Miller, 1904; Robert B. Austin, 1905; Robert Drummond, 1905; Nicolas Gebbie, 1905; John M. Gray, 1905; John Smith, 1905.

¹ Vacant through lapse of time.

THOMAS HUTCHESON BURSARY (*Theology, Law, or Medicine*).—This Bursary, formerly known as the Old Library Bursary, was founded by Mr. Thomas Hutcheson of Lambhill in 1641. Preference was given to a son of a burgher, particularly one of the name Hutcheson or Herbertson. The Patrons are the Magistrates and Town Council of Glasgow. Ordinance No. 83 of the Universities Commission (1889) prescribes that the Bursary shall be called the Thomas Hutcheson Bursary, and that it shall be lawful for the Patrons to appoint to it, without preference as to name or birth, any Master of Arts who is entering on his course of study in any one of the Faculties of Divinity, Law, or Medicine. The Bursary is tenable for four years, but if a bursar in Divinity graduate at the end of three years, he shall only retain his Bursary during the fourth year of tenure if he shall engage in a course of study in Divinity approved by the Senate. Value £11 2s. 2½d. per annum. When a vacancy occurs, applications are to be lodged with the Town Clerk, City Chambers, not later than 1st September.

Bursar—William Howat, M.A., 1904.

HYNDFORD AND ROSS BURSARY (*Arts*).—In 1617 Mr. Michael Wilson founded a Bursary, called the Hyndford Bursary, for a student in Philosophy. The right of presentation belonged to the representative of Sir James Carmichael, viz., Sir W. C. Anstruther, Bart. In 1659 Captain William Ross of Rosseyle founded the Ross Bursary for a student in Languages and Philosophy. The appointment was vested in the Earl of Glasgow. By Ordinance No. 95 of the Universities Commission (1889), these two Bursaries were combined into one, to be called the Hyndford and Ross Bursary. It is tenable for four years, but if the bursar graduate at the end of three years, he shall only retain his Bursary during the fourth year of tenure if he engage in a course of study approved by the Senate in subjects included in the curriculum for Degrees in Arts or in Pure Science. The patronage of the Bursary is vested in Sir W. C. Anstruther, Bart., and his heirs, and the Earl of Glasgow and his heirs, who exercise their right of presentation by turns. The appointment in 1905 belonged to the latter. In other respects the provisions of Ordinance No. 57 apply to the Bursary. Value £10 16s. 8d.

Bursar—Berry Preston, 1905.

JOHN FERGUSON JAFFREY BURSARY IN MENTAL PHILOSOPHY (*Arts*).—This Bursary, founded in 1877, is of the annual value of £34, and shall be awarded to a student on entering the third session of his attendance, i.e. a student who has attended at any of the Scottish Universities during each of the two previous sessions at least two classes in the Faculty of Arts other than the classes of Logic, Moral Philosophy, and English Literature, or who having passed the Preliminary Examination in Humanity and

Greek, has attended for one session the higher classes in those subjects, and who proposes to attend in the following sessions the classes of Logic, Moral Philosophy, and English Literature. Candidates are examined in such subjects in English Literature and Logic as may be fixed by the Senate. The examiners are the Professors of English Literature, Logic, and Moral Philosophy. The Bursary shall, as a rule, be tenable for two years, but on condition that the Bursar, during the two years of his tenure, shall complete his attendance on the classes of Logic, Moral Philosophy, and English Literature, and shall also attend one at least of the advanced classes taught by the Professors of Logic and Moral Philosophy, and shall pass the examinations in Logic, Moral Philosophy, and English Literature for graduation in Arts. The subjects of examination are—1. *Logic*: (a) Descartes, *Meditations*, (Veitch's translation); (b) Ferrier, *Lectures on Greek Philosophy*, the pre-Socratic period; 2. *English Literature*: (a) Shakespeare, *As You Like It*; (b) Tennyson, *Idylls of the King*. Candidates are not expected to deal with questions of textual criticism on either of the works in English Literature. There will be a competition in November, 1907.

Bursar—Campbell Stephen, 1905.

MALCOLM KERR BURSARIES (*Science, etc.*).—Two in number, founded in 1874, and consisting each of half the free annual proceeds of a sum of £1,000, bequeathed by the late Mr. Malcolm Kerr, stationer in Glasgow. One of the Bursaries is in Natural Philosophy, the other in Chemistry. The Bursaries are given on examination, and are tenable for three years, provided the Bursars continue for so long to prosecute in the University Laboratories, to the satisfaction of the Senate, the study of Natural Philosophy and Chemistry respectively. The subjects of examination in Natural Philosophy are the same as those for that subject in the examination for the ordinary degree of M.A., and in Chemistry, the same as those for the Final Science Examination for B.Sc. Present value, £22 to each Bursar.

Bursars—¹ Alfred Davidson (Chem.), 1903; ² James C. Wilson, (Nat. Phil.), 1904.

THE KINTYRE (KER) BURSARY (*Any Faculty*).—This Bursary founded in 1862 by Robert Ker, Esq., of Auchinraith, merchant in Glasgow, originated in the Founder's desire "to increase the opportunities of acquiring knowledge to the natives of Kintyre."

The Office-bearers of the Kintyre Club were appointed Patrons. By the Deed of Mortification, the free proceeds of a sum of £500 sterling—about £20 sterling—were appointed to be paid to a student to be nominated by them, and who should enjoy the said Bursary for the term of three years while prosecuting his studies at the

¹ Vacant through lapse of time.

² Vacant by resignation.

Glasgow University, with power to the Patrons to determine, in every case, whether the Bursary should be granted for a longer or shorter period than three years, but in no instance is it to be granted for a longer period than four years to the same student. No restriction is placed upon the student as to his profession or calling. Applicants must be connected with Kintyre, and be entering the University for the first time. When a vacancy occurs application should be lodged with the Honorary Secretary of the Kintyre Club, R. Harvey Pirie, LL.B., 173 St. Vincent Street, Glasgow, on or before 10th June.

Bursar—Archibald Mathieson (three years), 1905.

THE KINTYRE (ALEXANDER LOVE) BURSARY (*Any Faculty*).—This Bursary was founded in 1890 by the family of the late Alexander Love of Campbeltown. It consists of the free proceeds of a sum of £300 sterling—about £11—and is administered by the Office-bearers of the Kintyre Club. The Bursar must be a native or the son of a native of Kintyre, or actually resident there, and entering upon his first session at the University. His circumstances must be such as to render aid important. The period of tenure is not to exceed four years. When a vacancy occurs application should be made to the Hon. Sec. of the Kintyre Club, R. Harvey Pirie, LL.B., 173 St. Vincent Street, Glasgow, on or before 31st May.

Bursar—Archibald C. Brown, 1903.

LAING BURSARY OR BURSARIES (*Arts*).—The late Alexander Laing, LL.D., some time Professor of Mathematics in Anderson's College, Glasgow, who died in 1882, bequeathed to trustees the sum of £500 to found one or two Bursaries in the Faculty of Arts. The trustees by a deed dated 26th July, 1883, conveyed to the Senate the sum of £500 of the preference 4 per cent. stock of the Glasgow and South-Western Railway Company, under certain conditions and regulations. The foundation is for providing, in the option of the Senate, one Bursary of £20, or two of £10 each. The Bursary is open to competition to all students entering on their first session in the Faculty of Arts (a preference being given, *ceteris paribus*, to natives of Brechin). The period of tenure is three years. Should the Bursary become vacant otherwise than by lapse of time, the income of the fund during the vacancy is to be added to capital.

Bursar—Archibald Mathieson, 1905.

JAMES LAING BURSARIES (*Arts*).—Founded in 1892, under the Trust Disposition and Settlement of Mr. James Laing, Writer, Denny. So far as the funds admit, the Trustee appoints annually to two Bursaries, each of the annual value of £25, and tenable for four years. They are open to candidates (male and female) who have been educated for at least three years in any school or schools in the

County (including the Burgh) of Stirling, and who are entering upon their first or second year of study in the University of Glasgow. Applications with certificates of qualification and good conduct from the teacher or teachers under whom candidates have been educated, should be lodged with Mr. William Jenkins, Writer, Denny, not later than 1st September. The names of candidates who are found qualified will be sent by him to the Clerk of Senate that they may be entered at the University competition for Bursaries. Failing candidates qualified as above, the Bursaries are open to competition to students of the first or second year from any part of Scotland. (Two vacancies.)

Bursars—¹Hugh D. Sempill, 1902; ¹Robert Jenkins, 1902; Robert Craig, 1903; Jean G. Stephen, 1903; John Robb, 1904; William Thomson, 1904; John R. Peddie, 1905; Euphemia D. Gordon, 1905.

LAMB BURSARY (*Arts or Theology*).—Founded in 1863 by the late Rev. Dr. William Lamb, minister of Carmichael, and appropriated to a student in Arts or Divinity. Bursar appointed by the Minister and Kirk Session of Carmichael. The preference to applicants in the parish of Carmichael or Pettinain, and the restriction to applicants from the Presbytery of Lanark, were cancelled by Ordinance No. 57 of the Universities Commission (1889). Value, about £12 per annum.

Bursar—Henry J. C. Gibson, 1905.

LANFINE BURSARIES (*Arts*).—By the will of the late Miss Martha Brown of Lanfine a sum of £5000 was bequeathed in 1902 to this University, "to be applied in payment of Bursaries tenable for not more than four years, of not less than £25 and not exceeding £40 each per annum, to be held by students who have passed a competitive examination in classes connected with the Faculty of Arts under such conditions as the Principal and Senatus of Glasgow may from time to time prescribe, the said Bursaries to be called the Lanfine Bursaries."

The following regulations were adopted by the Senate on 19th February, 1903:—

1. There shall be six bursaries, each of the annual value of £27, and each tenable for two years.

2. They shall be held by students of either sex who, having passed the full Preliminary Examination in Arts, are pursuing a course for graduation with Honours.

3. Three bursaries shall be awarded annually in the following alternating order:—In April, 1904, and thereafter biennially (1908), one bursary in each of the following Groups of Honours, viz. Mental Philosophy, Modern Languages, English; in April, 1905, and

¹ Vacant through lapse of time.

thereafter biennially (1907), one bursary in each of the following Groups of Honours, viz. Economic Science, History, Semitic Languages.

4. (a) Candidates for the bursary in Mental Philosophy must be attending the ordinary class in Logic or in Moral Philosophy, and the bursary shall be awarded to the candidate who, in the year of competition, is highest in the honour list of the Ordinary Logic Class at the first vacancy, of the Ordinary Moral Philosophy Class at the second vacancy, and so on alternately.

(b) Candidates for the bursary in Modern Languages must be attending the ordinary class in French or in German, and the Bursary shall be awarded to the candidate who, in the year of competition, is highest in the honour list of the Ordinary French Class at the first vacancy, of the Ordinary German Class at the second vacancy, and so on alternately.

(c) Candidates for the bursaries in English, Economic Science, History, and Semitic Languages, must be attending the ordinary classes in English, Political Economy, History, and Hebrew respectively, and the bursary in each case shall be awarded to the candidate who, in the year of competition, is highest in the honour list of the class which, as a candidate, he is required to attend.

5. The first moiety of each bursary shall not be paid to the bursar until he produces a certificate bearing that he is attending an Honours Class in the Group in connection with which he has been appointed to the bursary ; and the last moiety of each bursary shall not be paid to the bursar until he has obtained the Degree of Master of Arts with Honours in the Group in connection with which he holds his bursary.

6. If in any year bursaries allocated to any of the above Groups are not awarded, such bursaries shall, in the succeeding year, be open to competition in the Groups of (a) Classics and (b) Mathematics and Natural Philosophy, and the award shall be made on the same principles as in the case of the bursaries in Mental Philosophy and Modern Languages.

7. A Lanfine Bursary shall not be held along with another bursary.

Bursars—Arthur E. Macgregor (Econ. Sc.), 1905 ; Jessie D. Borthwick (Hist.), 1905 ; Leonard J. Russell (Ment. Phil.), 1906 ; Isabella M. Ross (Mod. Lang.), 1906 ; William D. Taylor (English), 1906.

LEADBETTER BURSARY (Arts).—This Bursary was founded in 1855 by Mr. John Leadbetter, merchant, Glasgow. It was made tenable for four years, and the classes to be attended by the Bursar in each of the four years were prescribed. A preference was given to boys who had attended the five years' Classical Course of the High School of Glasgow. *Patrons*—The Lord Provost and Magistrates.

Ordinance No. 88 of the Universities Commission (1889) empowers the Patrons to present to the Bursary any person who has completed the five years' Classical course of the High School of Glasgow, whom failing, any person, without restriction as to parentage, who has received a similar classical education elsewhere. The Bursar must attend the Latin and Greek classes in the University during at least one year, and thereafter continue a course of study in the University necessary for the Degree of Master of Arts. The Bursary is tenable for four years, but if the holder graduate at the end of three years he shall only retain his Bursary during the fourth year of tenure if he shall engage in a course of study approved by the Senate in subjects included in the curriculum for Degrees in Arts or in Pure Science. In other respects the provisions of Ordinance No. 57 apply to this Bursary. When a vacancy occurs, applications are to be lodged with the Town Clerk, City Chambers, not later than 1st September. (Vacant.)

ARCHBISHOP LEIGHTON BURSARY (*Arts and Theology alternately*).—Robert Leighton, Archbishop of Glasgow, founded in 1681 two Bursaries, which were tenable for four years in Philosophy, and two or three years in Divinity. By Ordinance No. 86 of the Universities Commissioners (1889), the two Bursaries were combined into one of the annual value of £18, to be called the Archbishop Leighton Bursary. An appointment is made of a Bursar in the Faculty of Arts, and at the end of his period of tenure an appointment in the Faculty of Divinity, and so on alternately, the period of tenure in each case being three years, and a person who has held the Bursary in Arts being eligible for appointment also in Divinity. The appointment in 1907 will be for three years in Philosophy. The provisions of Ordinance No. 57 apply to this Bursary. When a vacancy occurs, two students are nominated by the Town Council, and examined by the Senate, who prefer the best scholar. Applications must be lodged with the Town Clerk, City Chambers, on or before 1st September.

Bursar—George A. W. Young (two years), 1905.

JOHN LEYDEN BURSARY (*Arts*).—Founded in 1879 by the Glasgow Border Counties Association in memory of John Leyden, poet and scholar. The Fund consists of the sum of £429 3s. 8d. raised by subscription. The Bursary is open to free competition under the same regulations as the competition Bursaries in the University. Tenable for three years. The holder to pass through the Arts course, and at the termination thereof to take the Degree of M.A.

Bursar—George Hope, 1905.

JAMES LOCHHEAD BURSARY (*Arts*).—Founded in 1886 in terms of the Trust Disposition and Settlement of Mrs. Robina Mitchell, who bequeathed £500 for that purpose, in memory of her brother,

who died in Ohio. A preference is given to students of the name of Lochhead, whose parents are members of the Established Church of Scotland, whom failing, to students whose parents are members of the said Church. The Bursary is tenable for three years in the Faculty of Arts.

Bursar—¹David J. Wallace, 1903.

LOCHHEAD AND MITCHELL BURSARIES (*Arts*).—Two in number and of equal value, founded in 1886, in terms of the Trust Disposition and Settlement of Mrs. Robina Mitchell, who bequeathed £2,000 (free of legacy duty) for that purpose. The present annual value is £33 to each bursar. A preference is given to students of the name of Mitchell or Lochhead, whose parents are members of the Established Church of Scotland, whom failing to students whose parents are members of the said Church. They are tenable for four years in the Faculty of Arts.

Bursar—William J. Merry, 1903 ; William Mitchell, 1904.

LOGAN BURSARIES (*One in Theology and One in Medicine*).—Two in number, one in Divinity and one in Medicine, founded in 1863, by Mrs. Logan, widow of Mr. William Logan, tinsmith in Glasgow. The Bursary in the Faculty of Divinity is tenable for three years, and the one in the Faculty of Medicine for four years. The preference to the names Logan and Johnstone was cancelled by Ordinance No. 57 of the Universities Commission (1889). The value of each is £17 per annum. Appointment by the Senate.

Bursar in Theology.—Archibald Campbell, 1904.

Bursar in Medicine.—Thomas J. Mackie, 1905.

LORIMER BURSARIES (*Four in Theology, Four in Medicine, and Eight in Arts*).—By Trust Disposition and Settlement of date 17th October, 1872, the late Mr. John Lorimer, merchant in Glasgow, directed his Trustees to make over to the Principal and Professors of the University of Glasgow, the residue of his estate, amounting to the sum of £8,594 5s. 5½d., the annual proceeds of £5,000 thereof to be applied in payment of Bursaries of an amount not exceeding £50 each, and tenable for three years. One Bursary at least is to be payable to a matriculated student of each of the following subjects:—1, Theology ; 2, Medicine ; 3, Philosophy ; 4, Mathematics ; and the proceeds of the remainder of such residue are to be applied in payment of smaller Bursaries tenable by students of the above-mentioned subjects.

The following regulations have been adopted by the Senate:—

1. The Bursaries shall be sixteen in number—namely, eight of the annual value of £24, and eight of the annual value of £16, and shall be tenable for three years.

2. Four Bursaries—viz., two at £24, and two at £16 shall be

¹ Vacant through lapse of time.

held by Students of Theology, and shall be open to competition to students entering the Divinity Hall. The second moiety of the third year's Bursar shall not be paid until the Bursar shall have passed the examinations for the degree of B.D.

3. Four Bursaries—viz., two at £24, and two at £16, shall be held by Students of Medicine, and shall be open to competition to students who have attended the first session of their professional study in the University of Glasgow. The subjects of examination, which shall be prescribed by the Faculty of Medicine, are Elementary Anatomy, Elementary Chemistry, and Botany. The examinations are held at the same times as the Autumn Professional Examinations in these subjects, and, in the case of Chemistry and Botany, on the same papers. The second moiety of the third year's Bursar shall not be paid until the Bursar shall have passed his Third Professional Examination for the degree of M.B.

4. Four Bursaries—viz., two at £24, and two at £16, shall be open for competition to students who, having passed their whole Preliminary Examination, are entering on their second session of attendance, and who, not having attended the classes of Logic, Moral Philosophy, and English Literature, propose to attend these classes in the following sessions. Candidates shall be examined in such subjects in English Literature and Logic as may be fixed by the Senate. The Examiners shall be the Professors of English Literature, Logic, and Moral Philosophy. Each Bursar must attend two classes in the Faculty of Arts. Immediately on his appointment, he must enter one or more of the classes of English Literature, Logic, and Moral Philosophy, and in the course of his tenure of his Bursary must attend, besides the above classes, one or more of the Honours classes in English Literature, Logic, or Moral Philosophy. The second moiety of the third year's Bursar shall not be paid until the Bursar shall have passed examinations in Logic, Moral Philosophy, and English for graduation in Arts.

5. Four Bursaries—viz., two at £24, and two at £16, shall be open for competition to students of either sex who, having passed the whole Preliminary Examination, are entering on their second session of attendance. Candidates shall be examined in such subjects in Mathematics as may be fixed by the Senate. The Examiners shall be the Professors of Mathematics and Natural Philosophy. Each Bursar must attend two classes in the Faculty of Arts. Immediately on his appointment he must enter the class of Mathematics, and prosecute the course of study required for passing the Honours examinations in Mathematics and Natural Philosophy for a Degree in Arts. The second moiety of the third year's Bursar shall not be paid until the Bursar shall have passed the examinations in Mathematics and Natural Philosophy for graduation in Arts or the First Science Examination in these subjects for graduation in Science.

In session 1906-7 four of the above £24 Bursaries will be open to competition—viz., two in Theology, two in Medicine, two in Philosophy, and two in Mathematics. The Bursaries in Theology will be decided by the results in the general competition for Bursaries in Theology. The competition for the Bursaries in Medicine will be held on 1st and 2nd October, 1906. For the Bursaries in Philosophy the subjects of examination will be those prescribed for the John Ferguson Jaffrey Bursary (see p. 336), and the examination will take place along with the Autumn examinations for M.A. in English and Logic. The examination for the Bursaries in Mathematics will take place along with the Arts and Science Preliminary Examination in Mathematics, but may embrace higher papers.

Bursars in Theology—¹Gavin Lawson, M.A., 1903; Alexander Moffatt, M.A., 1904; Thomas S. Glen, 1905; John Smart, 1905.

Bursars in Medicine—¹John M'Vittie, 1903; John Cruickshank, 1904; John A. M. Cameron, 1905; Hyacinth B. W. Morgan, 1905.

Bursars in Arts—²William Barclay (Phil.), 1903; ¹James Paul (Math.), 1903; Donald Stalker (Phil.), 1904; David B. Meek (Math.), 1904; David Ogg (Phil.), 1905; Hugh A. Reyburn (Phil.), 1905; Janet M'Cabe (Math.), 1905.

LUMSDEN BURSARY (*Theology*).—This Bursary was founded in 1850, by Mr. James Lumsden, stationer, Glasgow. Value, £15. It is given to a Divinity student of the first year, and may be held for four years. There is a preference to sons of members, or of deceased members of the Stationers' Company of Glasgow. The Patrons, viz., the Principal, the Professors of Divinity, Hebrew, and Church History, and the President of the Stationers' Company—have resolved that when no candidate with a preferential claim applies for the Bursary it shall be awarded in accordance with the results of the competition for Bursaries in Theology. (Vacant.)

LUSK BURSARY (*Arts*).—Founded in 1876, in accordance with holograph settlement executed by Mr. Robert Lusk, merchant in Greenock, who bequeathed the sum of £1,000, reduced by legacy duty to £900, for "a Bursary in connection with the Glasgow University, to be given to the most successful student attending the preparatory course of studies in said University who may intend to follow out the ministry in connection with any of the Presbyterian bodies in Scotland," "and who may, on public examination or competition, be found to be best qualified and most deserving." The competition is open to first or second year's students in Arts. Tenable for three years, but may be continued for an additional year. Value, £35 per annum.

Bursar—George A. M. Dickson, 1905.

¹ Vacant through lapse of time.

² Resigned.

MACARTHUR BURSARY (*Medicine*).—Founded in 1881 by Miss Jean Macarthur, in memory of her uncle, John Macarthur, Doctor of Medicine in Glasgow. The Bursary consists of the annual proceeds of £500. The administration is vested in a Committee appointed annually by the Faculty of Physicians and Surgeons of Glasgow. The Bursary must be held by a student prosecuting the study of Medicine in the University of Glasgow. Under the rules laid down by the Committee, applicants must have completed three winter sessions of medical study, and not have entered on the fourth winter session. Preference will be given to applicants who have taken one or more First Class Certificates in the Medical Classes. The Bursary is tenable for two years.

Application to be made prior to 15th April, 1907, to Alexander Duncan, LL.D., Faculty Hall, 242 St. Vincent Street, Glasgow, who will furnish forms of application.

Bursar—D. Alexis Thompson, M.A., 1905.

M'CRIE BURSARIES (*Arts*).—These Bursaries were founded by the Rev. James M'Crie, D.D., of Dangart, Senior Minister of the U.P. Congregation of Old Meldrum, in the County of Aberdeen. They are of the annual value of £25, tenable for four years, provided the holder passes a prescribed examination at the commencement of each session and complies with the other conditions mentioned in the Deed of Foundation. The Bursary fund consists of certain lands in the parish of Colmonell and other heritable and movable property mortified for the purpose and vested in the Magistrates and Town Council of Ayr. The candidates must have been born in the parishes of Ballantrae, Colmonell, Barr, Girvan, Ayr, Old Meldrum, Tarves, Daviot or Bourtie, or in the City of Aberdeen, or in the Town of Ayr. The students must also be the sons either of mechanics, or of cottars, or of farmers not paying more than £100 of yearly rent, or of ministers not having more than £130 of yearly income, without respect to religious sect or denomination. Candidates of the names of M'Crie, Forsyth, M'Cracken, or Spark, are to have a preference if otherwise deserving. The Bursaries may be held along with other Bursaries. Forms of application may be obtained from Mr. P. A. Thomson, Town Clerk, Ayr, and should be lodged with him on or before the first day of September in each year in which a vacancy occurs. The names of candidates who are found to possess the prescribed qualifications will be sent by him to the Clerk of Senate that they may be entered at the University competition for Bursaries for students of the first year. (Two vacancies).

Bursars—David Burns, 1903; William G. Johnston, 1904; James A. Ramsay, 1904.

JAMES MELVILLE M'CULLOCH BURSARY (*Arts*).—Founded in

1885 in memory of the late Rev. James Melville M'Culloch, D.D. minister of the West Parish, Greenock. It consists of the free annual income of about £400. It is open to competition to students of the first year in the Faculty of Arts, who shall have been educated for not less than three years at any school or schools in Greenock. Tenable for four years, the Bursar attending the qualifying course for the Degree in Arts. The second moiety of the fourth year's Bursar shall not be paid until the Bursar shall have passed all the examinations required for the Degree of Master of Arts. In the event of a vacancy occurring otherwise than by lapse of time, the Senate may appoint a student of the same standing qualified in like manner, or may arrange a new competition.

Bursar—¹ William King (1905), 1902.

MACDONALD BURSARIES (*Arts, Law, or Medicine*).—Two in number, founded in 1882, in terms of the Trust Disposition and Settlement of Mr. Alexander Macdonald, M.P., who bequeathed to the University £1,000 for the purpose of assisting students in a course of purely secular education. The Bursaries are equal in value and tenable for four years in Arts, Law, or Medicine. Only miners under the age of twenty-one years, who have worked underground in any part of the United Kingdom, are eligible as candidates. The Bursaries are awarded in accordance with the results of an examination in general knowledge, particularly in writing, arithmetic, geography, grammar, and history. (One vacancy.)

Bursar—Thomas M'Vittie, 1904.

JOHN AND ISABELLA MACDOUGALL BURSARIES (*Arts*).—Founded in 1884, under the Trust Disposition and Deed of Settlement of Miss Isabella Macdougall, Perth. Miss Macdougall directed her Trustees to devote the residue of her means and estate to the foundation and endowment of one or more Bursaries, payable to students born in the county or city of Perth, attending the classes in the Faculty of Arts, in the Universities of Edinburgh, Glasgow, and St. Andrews. The Bursaries are of the annual value of about £33, and are tenable for a period not exceeding three years. The Trustees are the Patrons. The candidates, who may be of any religious denomination, must undergo an examination by examiners appointed by the trustees. The Bursaries are open to students who are either (1) about to enter on their first session, and who shall pass the Preliminary Examination in Arts, or (2) who have already attended the junior classes for one session. A vacancy occurring otherwise than by lapse of time may be filled up by the appointment, after examination, of a student of equal standing with the retiring Bursar. It is not competent for any person to hold any of these Bursaries along with any other Bursary or appointment yielding to

¹ Vacant through lapse of time.

him an annual income of fifty pounds or upwards. The Trustees are the following ministers in Perth, viz.:—The Rev. Walter E. Lee, East Church Parish; the Rev. F. H. Martin, St. Paul's Parish; the Rev. Peter R. Landreth, West Church Parish; the Rev. J. M. Scott, Middle Church Parish; and their successors in office for the time being, Mr. Thomas Soutar, retired banker, and Mr. Wm. Cochrane Young, solicitor in Perth. Candidates are requested to send in their names and addresses to Mr. Young, 9 St. John Street, Perth, on or before 1st September. (Probably two vacancies.)

Bursars—¹James Cunnison, 1903; John M. Martin, 1904; Andrew Stewart, 1904.

MALCOLM M'EWEN BURSARY (*Arts or Science*).—Mr. William M'Ewen, tobacco manufacturer, Glasgow, who died on 16th December, 1878, by his Trust Disposition and Settlement dated 28th November, 1878, directed his trustees, Mr. James Boyd, writer, Glasgow, and others, to devote a sum of £500 to the foundation of a Bursary in the University of Glasgow, to be called the "Malcolm M'Ewen Bursary," in memory of his brother, Mr. Malcolm M'Ewen, who died on 16th January, 1878. The Bursary was founded in 1884. After consultation with the Senate, the Trustees resolved that the regulations for the Bursary should be as follows:—The Bursary is open to competition at the annual Bursary Examination to all students entering on the first session of attendance at the University, is awarded by the Senate in accordance with the results of that examination, and is tenable for four years. The Bursar on his appointment must elect to follow either the course of study qualifying for the Degree of M.A., or the course of study qualifying for the Degree of B.Sc., and must attend at least two classes each winter session. The Bursary is payable by equal moieties on the second day of February, and at the close of the winter session, but the second moiety of the fourth year's Bursary shall not be paid until the Bursar shall have passed all the examinations for the Degree appropriate to the course of study chosen by him at the beginning of his tenure of the Bursary. A vacancy occurring otherwise than by lapse of time may, in the discretion of the Trustees, either be filled up at the first term thereafter, or not till the usual term at which the competition for the Bursary would, in ordinary course, have fallen due, and, in the latter event, accumulations from this source are to be added to the capital fund.

Bursar—Alexander S. Fulton, 1905.

JAMES MACFARLANE BURSARY (*Theology*).—Miss Helen Macfarlane, who died on 12th March, 1886, by a Codicil dated 15th August, 1882, to her Trust Disposition and Settlement, directed her Trustees

¹ Vacant through lapse of time.

to hand over to the Senate the Portrait of her late brother, Dr. John Macfarlane, Professor of the Practice of Medicine in this University, and the sum of £1,000 free of legacy duty for the foundation of a Bursary in the Faculty of Theology, in memory of her brother, the Rev. Dr. James Macfarlane, minister of Duddingston. Preference to the name Macfarlane. The competition is open to Divinity students of the first year, who hold a Degree in Arts of any Scottish University, or who have passed their examinations in any four subjects taken out of at least two departments for graduation in Arts. The Bursary is now of the annual value of £25, and is tenable for three years. In the case of a vacancy occurring otherwise than by lapse of time, the Senate may appoint, with or without examination, a student of the same standing as the previous Bursar.

Bursar—John Macfarlane, 1904.

JOHN MACFARLANE BURSARY (*Medicine*).—Founded in 1874 by the brothers and sister of the late Dr. John Macfarlane, Professor of the Practice of Medicine in this University, and to his memory. Patrons—The Faculty of Medicine. It is of £40 annual value, and it is tenable for three years. The competition is open to students who have attended the first session of their professional study in the University of Glasgow. The subjects of Examination to be prescribed by the Patrons; and the success of the candidates in the examination in General Education will form an essential element of the decision. Any surplus which may accumulate from vacancies or otherwise, is to be applied to establish a "Macfarlane Prize" in the Class of Practice of Medicine. The subjects of Examination for this Bursary are Elementary Anatomy, Elementary Chemistry, and Botany. The examinations are held at the same times as the Autumn Professional Examinations in these subjects, and in the case of Chemistry and Botany on the same papers.

Bursar—William M'Adam, M.A., 1905.

ROBERT MACFARLANE BURSARIES.—By a Mutual Trust Disposition and Settlement of date 7th January, 1888, Miss Mary Ann and Miss Margaret Macfarlane directed their Trustees to make over to the Senate of the University of Glasgow a sum of £3,000 for the foundation of Bursaries in memory of their brother, Robert Macfarlane, Writer, Paisley, out of the estate bequeathed by him to them. The following regulations, giving effect to the provisions of the Trust Deed, were adopted by the Senate on 6th April, 1905, and approved by the University Court on 4th May, 1905, viz.:

1. The Bursaries shall be called the Robert Macfarlane Bursaries, and shall be three in number, of equal annual value.
2. In awarding the Bursaries the Senate shall give a preference to young men connected with Paisley.
3. One Bursary shall be tenable for three years in either Arts or

Law, and the appointment shall be determined by the General Bursary competition in Arts. Candidates for this Bursary must satisfy the Senate that they are looking forward to be lawyers.

4. One Bursary shall be given for proficiency in Scots Law, shall be awarded on the report of the Professor at the close of the winter session, and shall be tenable during the following year while the Bursar is attending some class or classes in the Faculty of Law not attended in a previous year; provided that the minimum attendance given by the Bursar be on one class of eighty lectures or on two classes each having forty lectures.

5. One Bursary shall be given, *mutatis mutandis*, for proficiency in Conveyancing.

These Bursaries are not tenable along with another Bursary or Money Prize.

Bursars—John O. Taylor, 1905; James M'Intosh, M.A. (Scots Law), 1906; Alexander B. Boyd (Conveyancing), 1906.

MACGROUTHER BURSARIES (Arts).—Two in number, founded in 1872, the one by Mrs. Sophia Susan MacGrouther, widow of Mr. James MacGrouther of Leigham Court Road, Streatham, Surrey, who mortified in favour of certain trustees the sum of £500; the other by the Misses Mary and Jane MacGrouther, residing in Glasgow, his sisters, who also mortified in favour of the same trustees the sum of £500, for the purposes of the foundation, and in memory of, and in fulfilment of the intentions of, the said James MacGrouther. The Senate are the Patrons. The Bursaries are open to competition to students entering the Faculty of Arts for the first time, and are awarded to students who, having passed the Arts Preliminary, have gained the highest marks in Mathematics in the Bursary examination, and have not obtained a bursary in the general competition. They are tenable for four years, subject in each case to the condition that the Bursar shall pass the examinations required of students proceeding to the Degree of M.A. An appointment to the £20 Bursary will be made in October, 1907.

Bursars—David N. Strathie, 1903; Robert C. Gray (Math.), 1905.

M'KECHNIE BURSARIES (Any Faculty).—Two in number, founded by the Trust Disposition and Settlement of the late Thomas M'Kechnie, merchant in Girvan, who bequeathed for that purpose the sum of £2,000 to the Minister of the Established Church in Girvan, the Magistrates of Girvan, and others, and appointed them patrons of the Bursaries. The Patrons, in nominating and presenting students to the Bursaries, are instructed to prefer, in the first place, such as are of the founder's kindred; secondly, such as are of the name of M'Kechnie; and thirdly, such as were born in the parish of Girvan, provided that such students are properly qualified by their previous education for entering the University of Glasgow.

Failing candidates qualified as above, the Bursaries are to be awarded to those who shall be found best qualified and deserving. The Bursaries are tenable for four years. When a vacancy occurs application should be made to Messrs. W. and D. Andrews, solicitors Girvan, early in August.

Bursars—John Brown (Arts), 1903 ; David F. Clark (Arts), 1904.

MACKINTOSH MENTAL SCIENCE BURSARY (*Medicine*).—Founded in 1889 by Dr. Donald Mackintosh of London, in memory of his brother, Dr. Alexander Mackintosh, for many years superintendent of the Royal Lunatic Asylum, Gartnavel. Value, about £31. Tenable for one year. The competition is open to matriculated students of medicine who have attended the Lectures on Insanity in the University, and will be awarded in accordance with the results of an examination conducted in June by the Professor of Practice of Medicine and the Lecturer on Insanity acting conjointly. The holder of the Bursary shall, while holding it, devote special attention to the practical study of Insanity to the satisfaction of the Faculty of Medicine.

Bursar—William Brown, M.A., and John C. Middleton, M.A., equal, 1905.

M'KISSACK BURSARY (*Medicine, Arts, or Divinity*).—Founded in 1900 in terms of the Trust Disposition and Settlement of Mrs. Jane M'Kissack, Nairn, who bequeathed £750 for that purpose, in memory of her husband, Charles M'Kissack. The Patrons of the Bursary are the Provost and Bailies and the Ministers of the Presbyterian and Congregational Churches in the Royal Burgh of Nairn. The Bursary is tenable for four years, and is to be given to a medical student prosecuting his studies at any College, University, or Training Institute approved by the Patrons, in preparation for Christian mission work among the Jews. Failing a student in medicine, the Bursary may be given to a student in Arts or Divinity having the same object in view. Applicants must be of British nationality and not under seventeen years of age at the date of presentation. Preference, *cæteris paribus*, will be given to candidates of the name of M'Kissack, or natives of the counties of Elgin and Nairn, or candidates who have at any time resided for twelve consecutive months in these counties. For further particulars apply to Messrs. Lamb & Co., solicitors, Nairn.

MACLEAN TRUST BURSARIES (*Arts*).—Under the scheme for the administration of the Trust of the late Colonel Alexander Maclean, approved of by the Court of Session on 18th July, 1895, the Governors are authorised to apply a portion of the revenue of the Trust in payment of Bursaries of the yearly value of not less than £25 each, tenable for four years at any Scottish University. The

Bursaries are open to students of either sex of the name of Maclean entering on the Arts curriculum, and are awarded by competitive Examination in such manner as the Governors shall determine. The Bursars must regularly attend at least two classes each winter session in the curriculum for a degree in the Faculty of Arts. But any Bursar who has held his Bursary throughout a three years' curriculum in the Faculty of Arts, and taken a degree in that Faculty, may continue to hold it during the fourth year in any other Faculty. The Governors are the Lord Provost and Magistrates of the City of Glasgow. Forms of application can be received in the month of April each year, from the Town-Clerk, Glasgow, with whom applications must be lodged. (No vacancy in 1906.)

Bursars—Christina M. Maclean, 1903; Ewen Maclean, 1903; William A. Maclean, 1903; Mary K. McLean, 1904.

MAITLAND CLUB BURSARY.—In 1888 Dr. W. H. Hill and Mr. J. Wyllie Guild, the then surviving members of Council of the Maitland Club, disposed of the remainder of the stock of the Maitland Club publications, and in pursuance of resolutions passed at meetings of the Council held on 3rd and 17th August, 1870, handed over the proceeds (£140) to the Senate for Bursary purposes. The free income is to be annually bestowed without any competitive examination on such student as the Senate may consider deserving. No appointment will be made until the free annual income amounts to £5.

ALEXANDER MANDERSON BURSARY (*Arts*).—Mrs. Margaret Manderson or Macintyre, Greenock, who died on 13th April, 1905, by her Trust Disposition and Settlement dated 17th February, 1903, bequeathed to the Senate of the University £500, free of legacy duty, to found a bursary to be called the Alexander Manderson Bursary in memory of her deceased brother. Candidates must be natives of the Lower Ward of Renfrewshire or have been educated for not less than three years in a school therein. The Bursary shall be open to students of the first year, both men and women, and awarded after a competitive examination in such subjects or subject in Arts as the Senate may from time to time prescribe. It is tenable for three years, subject to the condition that the second moiety of the Bursary for the last year shall not be paid until the bursar shall have passed all the examinations required for the ordinary Degree of M.A.

MARSHALL BURSARIES (*One in Theology and One in Medicine*).—Mrs. Barbara Lauder or Marshall, relict of Alexander Marshall, wholesale stationer, Bell Street, Glasgow, by her Will dated 8th December, 1874, bequeathed to the Senatus of Glasgow University the sum of £1,000, under deduction of legacy duty, to found two Bursaries of equal value, one in Divinity and the other in Medicine.

Tenable for four years. Preference to the name of Marshall, but provided "that the Principal and the Professors shall nominate and appoint such students only to the said Bursaries as they shall find, on such examination as they may appoint, to be properly qualified for entering upon the study of Divinity and Medicine at the said University." Present value, £16 per annum to each Bursar.

Bursar in Medicine—Alexander Leishman, 1904.

Bursar in Theology—John D. Brown, M.A., 1904.

MARSHALL TRUST BURSARIES (*Arts*).—Under scheme 198, section 29, of the Educational Endowments (Scotland) Commission, approved by Her Majesty in Council, on 17th March, 1888, the Governors of the Marshall Trust are instructed to apply (1) a sum not exceeding £300 per annum in providing University Bursaries. These Bursaries are awarded by competitive examination among pupils of either sex who have held free scholarships or school bursaries under the scheme, and pupils of either sex who are resident and attending public or State-aided schools in Lanarkshire or Stirlingshire, whose parents or guardians are of the class specified in section 25 of the scheme. The Governors may apply (2) a further sum of £300 per annum in providing similar Bursaries to be awarded solely to pupils who have held free scholarships under the scheme, who shall have competed for but failed to obtain any of the first mentioned Bursaries, but on condition that such free scholars shall pass the examination prescribed by the Governors. Each Bursary is £30 per annum, and is tenable for not more than five years. Forms of application may be obtained from the Secretary of the Trust—William Mitchell, LL.D., 134 Wellington Street, Glasgow—and should be lodged with him on or before the 1st day of September in each year. The names of candidates who are found to possess the prescribed qualifications will be sent by him to the Clerk of Senate that they may be entered at the University competition for Bursaries for students of the first year. The Bursaries will be awarded to those candidates highest in order of merit who fail to win a Bursary in the general competition. Under (1) there are two vacancies, and under (2) there are also two vacancies.

Bursars—¹James Ballantyne, 1901; ¹John J. Dempster, 1901; ¹Thomas Beaumont, 1901; Margaret O. Taylor (1903), 1902; Grace Oliphant, 1902; Neil M'Caig, 1902; David Taylor, 1902; Thomas Hyslop, 1903; William Oswald, 1903; Donald J. Clark, 1903; Janet S. M'Culloch, 1903; William Y. Colquhoun, 1904; Malcolm Manson, 1904; Robert Houston, 1904; Malcolm Littlejohn, 1904; John M. Short, 1905; Daniel W. Ritchie, 1905; Kenneth MacLean, 1905; Alexandrena Carswell, 1905.

¹ Vacant through lapse of time.

MENZIES BURSARIES (*Arts*).—The late Mr. James Menzies, of Glasgow, by his Will, dated 3rd November, 1837, left a sum of money to establish four Bursaries at either of the Universities of Edinburgh, Glasgow, or St. Andrews, tenable for four years, one to be given each year. The value of each Bursary is £45 per annum, but varies at the discretion of the Patrons. The Patrons are Sir Neil Menzies, Bart., of Menzies, and the Parish ministers of Dull, Weem, and Fortingall. In the first place, the kindred of the Testator; secondly, persons of the name of Menzies; thirdly, those born on the Menzies estates, will be preferred—provided always that they shall be found properly qualified by previous education; and failing these, the Patrons can present such as shall be found best qualified after due examination. The following are the subjects of examination:—*Latin*—Translation, (1) English into Latin; (2) Latin into English, with grammatical questions and exercises. *Greek*—Translation, Greek into English, with grammatical questions and exercises. *English*—(1) The growth, structure, and grammar of the language; (2) The History of English Literature; (3) A short essay on a prescribed subject. *Mathematics*—(1) Arithmetic, general; (2) Algebra, up to and including Quadratic Equations; (3) Geometry, Euclid, the first six books, and the first twenty-one propositions of the eleventh book, with deductions; (4) Trigonometry, up to and including the solution of triangles. Bursars to attend in some one of the above Universities the classes in their regular order for the M.A. Degree. Candidates are requested to send their names to Mr. Thomas Yool, The Menzies Estates Office, Aberfeldy, on or before 17th September. (One vacancy.)

Bursars—¹Alexander MacIntosh, 1902; John S. Menzies (at Edinburgh University), 1903; David Millar, 1904; Arthur J. A. Menzies (at Edinburgh University), 1905.

MERCHANTS' HOUSE BURSARIES (*One in Arts, One in Law, and Two in Medicine*).—Founded in 1879 by the Merchants' House of Glasgow. The Bursaries are of the annual value of £25 each, and are four in number—viz., two in Medicine, one in Arts, which may also be held in Engineering and Mechanics, and one in Law, tenable by students attending the requisite classes in the above Faculties, with a preference to the sons of matriculated members of the Merchants' House, and such others as the Lord Dean and Directors may deem deserving. 1. The Bursaries in Medicine are tenable for four years. Candidates must be entering on their first winter session of attendance on the ordinary curriculum for Medical Students. 2. The Bursary in Arts, or in Engineering and Mechanics, is tenable for four years. Candidates must be entering on their first session of study, and must attend each session two at least of the classes in the Arts curriculum, including, at the option of the candidate, the class of Civil Engineering and Mechanics. 3. The Bursary in Law

¹ Vacant through lapse of time.

is tenable for three years. Candidates must be entering on their first session of attendance on the classes in the Faculty of Law, and must give regular attendance for the three years on classes in that Faculty. The subjects of examination for the Bursaries in Medicine are the subjects of the Medical Preliminary Examination, and for the Bursaries in Arts and Law are those prescribed for the General Bursary Competition, special importance being given in the examination for the Arts Bursary to the subject of Mathematics. When a vacancy occurs, applications should be lodged with W. H. Hill, LL.D., Clerk to the Merchants' House, on or before 1st Sept.

Bursar in Arts—¹Murray Macgregor, 1902.

Bursary in Law—David H. Battersby, M.A., 1905.

Bursaries in Medicine—Walter Gilmour, 1903; John Gray, 1904.

METCALFE BURSARIES (*Science*).—Founded by the late Miss Sarah Metcalfe, Glasgow, who, by her Deed of Settlement and Codicils, dated respectively 8th August, 30th September, and 7th October, 1853, bequeathed, subject to the liferent of her brother, Mr. William Metcalfe, certain properties in Glasgow, "for encouraging poor students in prosecuting the studies of Mathematics, Practical Astronomy, Chemistry, and Civil Engineering." Mr. Metcalfe died on 25th January, 1869, and by resolution of date 14th April, 1870, the Senate instituted, besides a Metcalfe Fellowship of £100 annual value (for which see Index), at least two Metcalfe Bursaries or Scholarships, each of the annual value of £25, and tenable for two years, subject to the condition that the scholar attend the four classes of Civil Engineering, Senior Mathematics, Practical Astronomy and Chemistry; two at least of these classes to be taken each year. The scholars to be appointed by examination in Pure Mathematics, including the elements of Plane Trigonometry, of Mechanics, and of Theoretical Astronomy, from among matriculated students entering the Intermediate Honours class of Mathematics, or the class of Chemistry. (Two vacancies.)

Bursars—¹Donald Macphie, 1904; ¹Robert Jack (1905), 1904; Nigel G. Watt, 1905.

MITCHELL (See Lochhead and Mitchell, p. 342).

MONTEITH BURSARIES (*Arts*).—Founded in 1869 by Mr. James Monteith of 38 Duke Street, St. James's, London. Three in number, each of the annual value of about £14, and tenable for three years. They are open for competition to all matriculated students of the Faculty of Arts, being natives of Scotland, and sons of Scottish parents, and may be held along with another Bursary. The examination to be in French and German in alternate years. Occasionally an extra Bursary will be given to the second-best candidate, of the same value as the others, but tenable only for one year. At the commencement of session 1906-7 a regular three years' Bursary will be competed for, the examination being in German.

¹ Vacant through lapse of time.

Bursars—¹James M'Arthur (French), 1903 ; William M'Minn (German), 1904 ; Andrew Clark (French), 1905.

JOHN MONTEITH BURSARIES (*Medicine*).—Founded in 1884 by Mrs. Helen Monteith, Greenbank, Dowanhill Gardens, Glasgow, in memory of her husband, the late John Monteith. Mrs. Monteith assigned the sum of £1,000 to Dr. John Gray M'Kendrick, Professor of the Institutes of Medicine, Dr. James Duncan M'Laren, Fellow of the Faculty of Physicians and Surgeons in Glasgow, the late James Graham, LL.D., writer, Glasgow, and Robert Monteith, her adopted son, as trustees, in the first instance, for the administration of the fund. The annual income after payment of the expenses of administration is to be awarded as two Bursaries to students who have attended the first and second sessions of their professional studies in the University of Glasgow with a view to Graduation in Medicine in that University. The Bursaries are tenable for two years. One Bursary is awarded annually in the month of November, and is given to the candidate who gains the highest number of marks in the subjects of Anatomy and Physiology at the Professional Examinations in these subjects held during the previous year (*i.e.* the April and October preceding said month of November). The founder has directed that it be represented to the holders of the Bursaries that they should feel themselves in honour bound after graduation to render professional assistance to the poor as much as may lie in their power.

Bursars—¹Peter Mitchell, M.A., 1904 ; David A. Thomson, M.A., 1905.

MORGAN BURSARIES (*Arts and Theology*).—Mr. John Morgan, West India Merchant, who died at Springfield House, Bishopbriggs, on 4th May, 1894, in his Trust Disposition and Settlement directed the Merchants' House to pay over half-yearly to the Presbytery of Glasgow one third of the net revenue of his estate to be applied in providing Bursaries for students in the University of Glasgow intending to become ministers of the Church of Scotland, one third to students in Divinity and two thirds to students in Arts. The students in Arts must be under twenty years of age, and must have passed the Preliminary Examination. The appointments are made for one year only, but may be renewed from year to year for one or more years. No Morgan Bursary shall exceed £20 a year. The holder of another Bursary of £20 or upwards cannot be appointed to a Morgan Bursary, but the holder of a Bursary of less than £20 may be appointed to a Morgan Bursary of such value that the two Bursaries together shall not exceed £20. Further particulars and schedules to be filled up by applicants may be obtained from the Presbytery Clerk.

MUIR BURSARIES (*Two in Arts or Science, Two in Science, and One*

¹ Vacant through lapse of time.

in Theology).—Founded in 1880, in terms of the Trust Disposition and Settlement and Codicil thereto of the late Mr. Matthew A. Muir, merchant in Glasgow, who bequeathed to the Senatus Academicus of Glasgow University, free of legacy duty, the sum of £1,000 for providing a Bursary in connection with the Chair of Divinity, to be awarded to a student of Divinity during the last three years of his curriculum; a sum of £1,000 for providing two Bursaries of equal amount in connection with the Chair of Mathematics, to be awarded to advanced students in Mathematics, the period of tenure to be fixed by the Senate; and a further sum of £1,000 for providing two Bursaries of equal amount in connection with the Chair of Civil Engineering and Mechanics, to be awarded to advanced students of Engineering and Mechanics, the period of tenure to be fixed by the Senate. Any of the Muir Bursaries in Mathematics and Civil Engineering may be held along with another Bursary.

The following rules and regulations have, in accordance with the provisions of the Deed, been sanctioned by Mr. Muir's trustees, and are to be observed in all time coming:—

1. *Muir Bursary in Divinity*.—Candidates must be entering on their first session in Theology in the University, and the appointment to the Bursary shall be determined by the result of the annual competitive examination for Bursaries in Theology. The competition shall be open to candidates holding a Degree in Arts in any Scottish University, or who have passed their examinations in four subjects taken out of at least two departments for graduation in Arts. The Bursary shall be tenable for three years, but the second moiety of the third year's Bursary shall not be paid until the Bursar shall have passed the examinations for the Degree of Bachelor of Divinity.

2. *Muir Bursaries in Mathematics*.—Two in number, of which the Junior Bursary shall be tenable for two years, and the Senior Bursary for one year, the former being of half the annual value of the latter. The appointment shall be determined by the proficiency shown by the candidates in the earlier part of their Mathematical course, and the successful candidates shall prosecute the study of the Higher Mathematics during their tenure of the Bursaries. No candidate shall be allowed to hold both Bursaries at the same time. Should the Junior Bursary be resigned by the Bursar at the end of his first year of tenure, the Senate may make an appointment for the remainder of the period.

3. *Muir Bursaries in Civil Engineering and Mechanics*.—Two in number, and of equal value. The appointments shall be determined by the proficiency shown by the candidates in the earlier part of their Engineering course. The period of tenure for each Bursary shall be the session of attendance on the Senior Class of Civil Engineering and Mechanics (Class IV.). Should a vacancy occur

by reason of non-attendance of a selected candidate, the Senate may make an appointment for the remainder of the period. No candidate shall be allowed to hold both Bursaries.

4. The Senate reserve the right to withhold the Bursary in any case in which a satisfactory standard has not been attained by any of the competitors.

5. Arrangements for carrying out these rules and regulations shall from time to time be made by the Senate, and notice thereof shall be published in the *University Calendar*.

Arrangements for Session 1906-7.—*Muir Bursaries in Mathematics.*—The appointment to the Junior Bursary, tenable during sessions 1907-8, 1908-9, shall be determined by the results of the written examinations passed in the course of the session 1906-7 by the public students of the Ordinary Class of Mathematics. The successful candidate shall, during session 1907-8, attend the Intermediate Honours Class, and during session 1908-9 the Advanced Honours Class of Mathematics. The appointment to the Senior Bursary, tenable during session 1907-8, shall be determined by the results of the written examinations passed in the course of the session 1906-7 by the public students of the Intermediate Honours Class. The successful candidate shall, during 1907-8, attend the Advanced Honours Mathematical class.

Muir Bursaries in Civil Engineering and Mechanics.—Candidates for the Bursaries tenable during session 1907-8 must be (a) students attending during session 1906-7 Engineering Class III. or either class of Electrical Engineering, who are also attending or have in a previous session attended the Junior or the Senior Class of Engineering Drawing and Calculations, or (b) students attending during session 1906-7 the Junior or the Senior Class of Engineering Drawing and Calculations, who have in a previous session attended the Engineering Class II. or Class III. or either class of Electrical Engineering. The appointment shall be made by consideration of merit shown during attendance on, and by examination in the subjects of, those classes. The successful candidates shall, during session 1907-8, attend the Senior Class of Civil Engineering and Mechanics (Class IV.).

Bursars in Mathematics.—Junior Bursar for sessions 1906-7, 1907-8, Caleb A. Stewart; Senior Bursar for session 1906-7, John M. Strang, 1906.

Bursars in Civil Engineering and Mechanics for session 1906-7—James Barr and Thomas B. Maxwell, 1906.

Bursar in Theology.—¹ Robert C. Thomson, M.A., 1903.

WILLIAM MUIR DIVINITY BURSARIES (*Theology*).—Established in 1886 by the Governors of the Glasgow General Educational Endowments Board, under Section 35 of their Scheme. The Bursaries are

¹ Vacant through lapse of time.

two in number, each of £25 annual value. Candidates must have passed the examination of the Examining Board for entrance to the Divinity Hall of the University, and must lodge applications with Mr. W. H. Macdonald, Hutchesons' Buildings, Ingram Street, on or before the 11th day of October. The Bursaries are awarded in accordance with the results of the competition for Bursaries in Theology, and are tenable for two years.

Bursars—¹George W. Walker, M.A., 1904; John M. Hunter, M.A., 1905.

NOTMAN BURSARY (*Theology*).—By deed of Settlement dated 15th August, 1876, Mrs. Margaret Adam Notman or Napier of Hillhead, Glasgow, widow of Mr. William Napier, directed her executors to pay over to the Principal and Professors of the Glasgow College, the sum of £500 sterling for the purpose of founding a Bursary in the College, to be called the Notman Bursary, in memory of her father and brother. The Bursar to be a student of Divinity, who shall appear in public examination to be best qualified and deserving. Present value, £18 per annum.

Bursar—¹Dugald M'Callum, 1903.

JAMES PATERSON (BAPTIST) BURSARY (*Arts*).—Founded in 1885 in commemoration of the completion, in 1879, of the fiftieth year of the existence of Adelaide Place Baptist Church, Glasgow, and of the Pastorate thereof of Dr. James Paterson during the same period. The sum subscribed for the purpose, amounting with interest to £619, was assigned and conveyed to the Senate in trust to be applied in all time coming to provide a Bursary in the Faculty of Arts to be called the James Paterson Bursary. The Bursary is tenable for four years, and is open to competition to any student of the first year in Arts who is a member of a Baptist Church, and who is entering upon his studies with a view to the ministry in the Baptist denomination. The Bursar during his tenure of the Bursary must be a member of Adelaide Place Baptist Church or of some other Baptist Church in Glasgow or neighbourhood. The Bursar must graduate in Arts, and before payment of the second moiety of the last year's Bursary must produce evidence that he has taken the degree, or that he has passed all the examinations necessary for graduation. On the Bursary falling vacant otherwise than by lapse of time, the Senate may appoint for the remainder of the term, or for the full period after competition. Before payment of the second moiety in each year the Bursar must produce a certificate of fitness for the ministry from a Committee of Adelaide Place Baptist Church, from the Baptist Union of Scotland, or some recognized Educational Institution of the Baptist Body.

Bursar—Thomas W. Armour, 1904.

¹ Vacant through lapse of time.

JAMES PATERSON BURSARY (*Arts*).—In 1904 the Trustees of the late Rev. James Paterson, D.D., of Adelaide Place Baptist Church, Glasgow, transferred to the University Court £560 of Caledonian Railway 4 per cent. Consolidated Preference Stock, No. 2, for the foundation of a Bursary in Arts in terms of his Trust Disposition and Settlement. He prescribed not only the subjects but also the books on which the competitors should be examined. The following regulations drawn in accordance with the provisions of the will were adopted by the Senate on 6th April, 1905, and approved by the University Court on 4th May, 1905, viz.:

1. The Bursary shall be in the Faculty of Arts, and shall be open for competition to students of the first or second year.

2. Candidates shall undergo a special examination in Latin (Virgil), Greek (the New Testament), Hebrew (Proverbs), and Logic (Whately's Logic).

3. The Bursary shall be tenable for three years, and the Bursar shall study for a degree in Arts.

4. The second moiety of the third year's burse shall not be paid till the Bursar has taken the degree of M.A.

The Bursary will be open to competition in October, 1906.

JAMES ALEXANDER PATERSON BURSARIES (*Arts and Medicine*).—Founded in 1892, under the Trust Disposition and Settlement of James Alexander Paterson (for many years a member of Shamrock Street United Presbyterian Church), who died at Glasgow on 31st January, 1889.

The Bursaries in Arts are tenable for three years. They are open to competition to students entering upon the first or second year of their attendance at the University, who purpose studying for the ministry in connection with the United Free Church, and who intend to qualify for and take, in the University of Glasgow, the degree of M.A. Each candidate before the competition must lodge with the Clerk of Senate, (1) a written declaration of his intention to comply with and observe these conditions, and (2) a certificate from the Convener or one of the Clerks of the College Committee of the United Free Church of Scotland, bearing that the Candidate is recognized by that Church as an accepted student pursuing his studies with a view to the ministry therein. In October, 1906, three Bursaries of £30, £20, and £10 respectively will be offered for competition. The Examination is in Hebrew (Book of Ruth) and Greek (Acts of the Apostles). The last moiety in the last year is payable after the Bursar has passed all the examinations for the degree of M.A. In the event of the holder of a Bursary graduating at the end of his second year of tenure, he shall retain his Bursary, during the third year of tenure, only on condition that he shall engage in a course of study in the University of Glasgow approved by the Senatus Academicus in subjects included in the curriculum for degrees in Arts.

The Bursaries in Medicine are tenable for four years. They are open to competition to students entering upon the first or second year of their medical curriculum at the University of Glasgow, who intend to qualify for and take, in the University of Glasgow, the degree of M.D. Each candidate must before the competition deliver to the Clerk of Senate a written declaration of such intention. The subjects of examination are Mathematics and Natural Philosophy, and the papers will be on the same standard as the papers in Mathematics and Dynamics for the Bursary competition in Arts. Two Bursaries of £25 and £20 respectively will be offered to competition in October, 1906. The last moiety in the last year is payable after the Bursar has passed all the examinations for the degrees of M.B. and Ch.B.

It shall be competent for the holders of these Bursaries, whether in Arts or in Medicine, to hold any other Bursary or Scholarship in this University, if the Regulations of that other Bursary or Scholarship permit.

Bursars in Arts—¹Bruce B. Blackwood (£35), 1903; ¹James N. Alexander (£25), 1903; Samuel F. Hunter (£35), 1904; Joseph Gray (£25), 1904; Louis C. Phillips (£20), 1904; Alexander D. Muir (£35), 1905; Duncan W. Semple (£25), 1905; Stewart R. Scott (£20), 1905.

Bursars in Medicine—¹Thomas Miller (£35), 1902; ¹Hugo G. Robertson (£25), 1902; Robert M. Morison (£35), 1903; Frank N. Marsh (£25), 1903; Adam Patrick, M.A. (£35), 1904; William M'Adam, M.A. (£25), 1904; James Dunlop (£35), 1905; James B. Galbraith (£25), 1905.

PATRICK BURSARIES (*Arts*).—These Bursaries were founded in 1860 by Mr. William Patrick of Roughwood, W.S., and were originally two in number, the one consisting of the free annual proceeds of a sum of £2,000 of consolidated stock of the Glasgow and South-Western Railway, the other of the free annual proceeds of £1,000 of the same stock. They were tenable for two years, but might be continued for other two. By Ordinance No. 85 of the Universities Commission (1889) the number of Bursaries was increased to three, all equal in value, and tenable for four years. The present annual value of each is £32. If a Bursar graduate at the end of three years he shall only retain his Bursary during the fourth year of tenure if he shall engage in a course of study approved by the Senate in subjects included in the curriculum for Degrees in Arts or in Pure Science. In other respects also the provisions of Ordinance No. 57 apply to the Patrick Bursaries. Candidates must have gone through a course of education at some one of the Public Schools in the County of Renfrew, where a regular course of Classical Study is pursued;

¹ Vacant through lapse of time.

and must be in circumstances to render it desirable that they should have assistance in prosecuting their studies at the University. The Rector or Head Teacher of such Public School to grant a certificate to any number, not exceeding four of his best scholars, who shall be entitled to present themselves to the Principal and Professors as candidates for the Bursaries. Certificate forms may be obtained from the Assistant Clerk (Matriculation Office).

Bursars—Thomas N. M'Ilravey, 1903 ; Edward S. Russell, 1904 ; Adam Scott, 1905.

PENDER MEMORIAL BURSARY.—Founded in 1898 by a Committee of which the Marquis of Tweeddale was Chairman to commemorate the leading part taken by the late Sir John Pender, G.C.M.G., in the establishment and development of Submarine Telegraphy and in its extension throughout the world. The fund consists of about £1,650, and the annual value is about £52. The following regulations were made by the Senate after communication with the Glasgow and West of Scotland Technical College and the Committee :—1. That the holding of a Diploma in Electrical Engineering of the Glasgow and West of Scotland Technical College be a condition of appointment to the Bursary. 2. That the appointment to the Bursary be made by the authorities of the Glasgow and West of Scotland Technical College. 3. That the Bursary be tenable for one year. 4. That the Bursar be required during his tenure to attend in the University three full courses or their equivalent from among those that would constitute in his case a qualifying curriculum of study for the Degree of B.Sc. in Engineering. 5. That, in the event of there being no candidate deemed worthy of appointment in any year, the interest be held over to provide a second Bursary in a subsequent year.

Bursar—

GLASGOW PERTSHIRE SOCIETY'S BURSARY (*Arts*).—Founded by the Glasgow Perthshire Society in 1873. Value, £25, and tenable for three years. Open to competition to natives and sons of natives of the county of Perth, and also to sons of persons who are *bonâ fide* residents in that county, and have resided in it for not less than three years at the time of the competition. Candidates must be entering on their first year of attendance as students in the University of Glasgow, and the holder of the Bursary will be required to complete attendance on at least two of the classes in the curriculum of Arts in each session. When a vacancy occurs names of candidates should be sent to Messrs. George Gray and Son, County Buildings, Glasgow, Secretaries of the Society, not later than the twenty-fifth day of August preceding the competition.

Bursar—¹ James Cunnison, 1903.

¹ Vacant through lapse of time.

POLLOCK BURSARIES (Arts).—Founded in 1878, in terms of the Trust Disposition and Settlement of the Rev. Alex. Pollock, senior minister of the Free South Church, Paisley, who bequeathed £3,000, free of legacy duty, for that purpose. The Bursaries are at present each of the annual value of £37, and are designed to assist young men entering the University of Glasgow, whose circumstances are such as to render it desirable that they should have assistance in prosecuting their studies. The patrons are the Principal and Professors in the Faculty of Arts. Each candidate must lodge along with his application a letter from the Rector, Headmaster, or Classical Teacher of one of the Public Schools or Public Academies within the parliamentary boundaries of the burgh of Paisley, where a regular course of Classical study is pursued, certifying that he has completed his course of education at such school or academy. Certificate forms may be obtained from the Assistant Clerk (Matriculation Office). Should no such qualified candidates present themselves, or should the otherwise qualified candidates fail to reach a satisfactory standard in the Bursary Examination, the Bursary or Bursaries vacant for the time being shall be open to all the candidates in the ordinary Bursary Competition. The Bursaries are three in number, and are tenable for three years, during which period the Bursars must be students in the Faculty of Arts. The second moiety of the third year's Bursary shall not be paid until the Bursar shall have passed the examinations in four subjects taken out of at least two departments for graduation in Arts.

Bursars—¹William M'Ewan, 1903; John G. Ritchie, 1904; George C. Hutton, 1905.

T. and V. PRATT BURSARIES (Any Faculty).—The late Mr. Thomas Pratt, who resided at Castlevett, near Lanark, by his Trust Disposition and Settlement, dated 22nd December, 1877, directed his Trustees, as soon after his death as convenient for them, to set apart and invest in name of themselves and such other Trustees as they might deem suitable, a sum to yield an annual income of £40, for the purpose of establishing two Bursaries of £20 each, to be called the T. and V. Pratt Bursaries, to assist in maintaining and educating two students in the University of Glasgow or Edinburgh. The necessary funds have now been set aside and invested in name of Trustees for this purpose. The Bursaries are open to sons and daughters of working men residing in or belonging to the United Parishes of Wiston and Roberton, and the Parish of Lamington. His Majesty's Inspector of Schools for the district is to name the candidates found after examination to be best qualified and most deserving of the Bursaries, and the examination which, with the concurrence of the Trustees, he at present prescribes is the General

¹ Vacant through lapse of time.

Bursary Competition Examination in Arts at Glasgow University. The Bursaries are tenable for four years, or such shorter time as the Bursar may remain at the University, unless the Trustees are dissatisfied with the Bursar's conduct or diligence. When a vacancy occurs, applications should be lodged with the Trustees' Agents, Messrs. Fyfe, MacLean & Co., Writers, 115 St. Vincent Street, on or before 1st September. (Two Bursaries vacant.)

RAINY BURSARIES (*Medicine*).—In 1872, Dr. Harry Rainy, Emeritus Professor of Medical Jurisprudence in this University, made over to the Senate the sum of £1,000 for the institution of two Bursaries in the Faculty of Medicine, and a further sum of £500 to be invested as a supplementary or augmentation fund. The interest of the Bursary Fund is to be divided annually between the two Bursars; and the interest of the supplementary fund is to be employed towards defraying the expenses of administration, and bringing up, when necessary, the annual salaries of the Bursars to £20 each, and increasing the supplementary fund. Should this fund accumulate to £1,000, one half of it is then to be added to the Bursary fund, the interest of which shall be divided as before between the two Bursars. If by this process of augmentation, which is to be repeated as often as the supplementary fund amounts to £1,000, the Bursary fund shall at length yield £60 per annum to each Bursar, the Senate may continue the same process, or constitute additional Bursaries on the principle explained above, the original Bursaries remaining of the value to which they have been raised by augmentation. The augmentation fund is not at any time to be reduced below £500.

The successful candidate may hold his Bursary for two years, namely, during his fourth and fifth years of study in the University of Glasgow. A vacancy occasioned by death, irregular attendance, or misconduct, is not to be filled up till the usual term at which the competition for that Bursary would have fallen due, and accumulations from this source are to be added to the supplementary fund.

A Rainy Bursary will be awarded in November, 1906, to the qualified candidate who, not being the holder of a bursary of equal or greater value, shall be found to have passed in the year 1906 in Anatomy and Physiology of the second Professional examination, and whose aggregate of marks in these subjects and in Chemistry, Botany and Zoology of the first Professional examination, is the highest.

Bursars —¹ John Stevenson, 1904; Matthew J. Stewart, 1905.

RAMSAY WALKER BURSARIES (*Arts*).—Two in number, founded in 1879, under the Trust Disposition and Settlement of Miss Ramsay Walker, Crosshill, who bequeathed £700, reduced by legacy duty to £630, for educating two students with a view to the ministry of

¹ Vacant through lapse of time.

the Established Church of Scotland. Preference to kindred of the founder, whom failing, to students of the name of Walker, whom failing, to natives of Glasgow, whom failing, the Bursaries will be thrown open to public competition. Candidates must be qualified by their previous education for entering the University. Tenable for four years.

Bursars—Robert P. Fairlie, 1905 ; Archibald U. Millar, 1905.

ROSS BURSARY.—(See Hyndford and Ross, p. 336.)

JOHN ROSS, JUNIOR, BURSARY (*Theology*).—Founded in 1880 by Mrs. Ross, widow of Mr. John Ross, junior, merchant in Glasgow, in memory of her husband. Patrons—The Senate of the University. The Bursary Fund consists of the capital sum of £1,000, set aside by Mrs. Ross for that purpose, and the present annual value is £32. The Bursary is tenable for three years by a student of Divinity in the regular course of study for the degree of Bachelor of Divinity with a view of becoming a clergyman of the Established Church of Scotland. Candidates must be entering on the first session of their study in Theology in the University, and the award shall be determined by the result of the annual competitive examination for Bursaries in Theology. In cases of equality in the competition there is a preference to the student who may be thought to stand most in need of help to carry on his theological studies, or to one who is a native of Ayrshire. The second moiety of the third year's Bursary shall not be paid to any Bursar unless and until he shall have passed all the examinations required for the degree of B.D. In the case of a vacancy occurring otherwise than by lapse of time, the Senate may appoint, with or without examination, a student of the same standing as the previous Bursar.

Bursar—Andrew C. Baird, M.A., B.Sc., 1905.

SANDERS BURSARY.—(See Boyd and Sanders Bursary, p. 311.)

(SIR WALTER) SCOTT BURSARIES (*Arts*).—The centenary of the birth of Sir Walter Scott was celebrated in Glasgow in 1871, and in conformity with a suggestion made by Lord Stanley (Earl of Derby), then Lord Rector of the University, the committee who had charge of the arrangements resolved to raise by public subscription a fund for the benefit of distinguished students, and to associate it with Scott's name. The amount subscribed was £3,500, and accordingly two Bursaries, along with the Scott Scholarship, were founded in 1874. The fund is administered by trustees, two of whom are elected by the Senatus, two by the Merchants' House, one by the Faculty of Physicians and Surgeons, one by the Faculty of Procurators, and one being an Assessor of the Council in the University Court, appointed by the four Assessors or a majority of them, in accordance with the provisions of Ordinance No. 91 of the Universities Commission (1889). The Bursaries are now three

in number, each of the annual value of £25, and tenable for four years. They are open to free competition, under the same regulations as the competition Bursaries in the University.

Bursars—George R. Robertson, 1903; Hugh F. Martin, 1904; Margaret E. Taylor, 1905.

SHEARER BURSARIES (*Any Faculty*).—Founded in the year 1887, by Archibald Shearer of Boag, who resided in Beith. By Deed of Mortification executed by Mr. Shearer dated 29th April, 1887, he conveyed his lands of Boag, in the parish of Kilbirnie, to trustees for the foundation and endowment of three Bursaries for the advancement of the higher education of the young men of his native parish of Dalry, in the county of Ayr. The Deed provides that the Bursaries shall be open to applicants between the ages of fourteen and twenty-four, who are the sons of parents or of a surviving parent *bona fide* resident for a period of not less than two years immediately preceding the date of application in the parish of Dalry, or to applicants who, for a period of not less than the last two years of their school curriculum, have received their education in the schools within the said parish, to enable the Bursars to pursue their education as students at the University in one or other of the Faculties. Students who have enjoyed a Bursary during their Arts course are eligible for a second Bursary in another Faculty. Applicants to undergo such examination as the trustees may from time to time appoint. Each Bursary to be one-third of free income from the lands of Boag, but not exceeding the annual sum of £30, and to be tenable for three years. Further information will be afforded by the Agents of the Trustees, Messrs. J. & J. McCosh, writers, Dalry. (No vacancy.)

SHIPWRIGHTS' COMPANY BURSARY.—The Fishmongers Company of London has placed the sum of £50 per annum at the disposal of the Educational Trust Fund Committee of the Shipwrights' Company for a period of three years that a Scholarship or Bursary may be given to a deserving student of Naval Architecture in this University. Appointment to the Bursary rests with the Educational Trust Fund Committee, and when a vacancy occurs the Senate is invited to nominate a promising and deserving student.

Bursar—¹ Richard J. L. Ward, 1903.

SIMSON BURSARY (*Arts or Divinity*).—This bursary, of the annual value of about £18, was founded in 1869 by James Simson. The bursar must be a native of Dunbar, and must be attending any Scottish University in the prospect of becoming a minister of the Church of Scotland or of going abroad as a missionary. It is tenable for one or more years, not exceeding three. Candidates must apply to the Session Clerk, Dunbar Parish Church.

¹ Vacant through lapse of time.

SMITH (CRUTHERLAND) BURSARY (*Any Faculty*).—In 1849 Dr. John Smith of Crutherland founded two bursaries, which were not restricted to any particular Faculty. Patrons—the Directors of the Incorporated Company of Stationers. Sons of members of the Company are preferred, then sons of persons connected with any of the trades included in their charter, whom failing, such other students as may be approved of by the patrons. The value of each was £9 per annum, and they were tenable for one or more years at the option of the patrons. Ordinance No. 77, issued on 15th February, 1895, provides that the two bursaries shall hereafter be conjoined into one, and that the bursary shall be tenable for four years. If a bursar in Arts graduate at the end of three years, he shall only retain his bursary during the fourth year of tenure if he shall engage in a course of study approved by the Senate in subjects included in the curriculum for Degrees in Arts or in Pure Science. If a bursar in Divinity graduate at the end of three years he shall only retain his bursary during the fourth year of tenure if he shall engage in a course of study in Divinity approved by the Senate. Applications to be made to Mr. R. Brodie, 77 St. Vincent Street, Glasgow.

Bursar—Andrew Cunningham (three years), 1905.

STEVENSON OF DALRY BURSARIES (*Arts*).—The Rev. Robert Stevenson, D.D., minister of the Parish of Dalry, Ayrshire, who died on 11th September, 1890, by his Trust Disposition and Settlement dated 28th July, 1890, directed his Trustees to pay over to the University Court the sum of £2,000, free of legacy duty, for the foundation of two Bursaries in Arts. They are open for competition to students entering on the first or second session of attendance in the Faculty of Arts, who are prosecuting their studies with a view to the ministry of the Church of Scotland, with a preference in the first place to natives of the parish of Dalry in Ayrshire, and in the second place to natives of the parishes of Bannockburn or St. Ninians in Stirlingshire. The Bursaries, which are each of the annual value of £33, are tenable for four years.

Bursars—Andrew Currie, 1904 ; George D. Henderson, 1905.

ANDREW AND BETHIA STEWART BURSARIES (*Arts and Law or Medicine*).—Miss Bethia Stewart, of Moss-side Park, Crossmyloof, who died on 10th April, 1902, directed her Trustees to give effect to the wishes of her brother Andrew Stewart, who predeceased her, by applying the income of the residue of her estate to the payment of bursaries for students in the University of Glasgow.

The Bursaries in Arts are each of the annual value of £20, and are tenable for four years. Candidates must have qualified for the Arts Course either by gaining a Group Leaving Certificate of the Scotch Education Department or by passing the University Pre-

liminary Examination in Arts, and must undergo a written examination, comprising an English Essay, and papers in *either* French or German or Italian, and also an oral examination in the foreign language selected by the candidate for the written competition.

The Bursaries in Law or Medicine are each of the annual value of £50, and are tenable for three years. Candidates must be Masters of Arts of the University of Glasgow, and must undergo a written examination, comprising an English Essay, and papers in not more than two of the following subjects, viz., Latin, Greek, French, German, Mathematics, and also an oral examination in the subjects selected by the candidate for the written competition.

Three Bursaries in Arts, and one in either Law or Medicine, will be open for competition in September, 1906. The names of candidates should be entered not later than 1st September, 1906, with Messrs. John Steuart and Gillies, Writers, 204 West George Street, Glasgow, from whom further information and Forms of Application may be obtained.

Bursars in Arts—Oswald J. Gardner, 1903; Elizabeth F. Stevenson, 1903; Mary C. Waddell (1905), 1904; Alice M. Nelson, 1904; Mary Hunter, 1904; Ada M. W. Renwick, 1904; Mary P. Houstoun, 1904; Margaret Buchanan, 1905; Catherine Craig, 1905; Isabella Davidson, 1905; Ruby Jex Long, 1905; Charlotte W. Small, 1905.

Bursars in Law—Robert Browning, M.A., 1904; Thomas D. K. Murray, M.A., 1905.

Bursars in Medicine—Adam Patrick, M.A., 1904; James Dunlop, M.A., 1905.

STEWART BURSARIES (*Arts*).—These Bursaries, three in number, founded in 1809 by the Rev. James Stewart, are in the gift of the Senate. They commence with the Humanity or the Greek Class, and may be held during the Gown Course. Value, £15 per annum each. The names Stewart and Simpson were preferred, but this preference was cancelled by Ordinance No. 57 of the Universities Commission (1889). In case of a vacancy, a student of the same standing is appointed. The Senate, acting under Section xiii. of the said Ordinance, have resolved to award one of the Stewart Bursaries in respect of exceptional distinction in English, to a student of the first year who, having passed the Arts Preliminary, has gained the highest marks in English in the Bursary Examination and has not obtained a bursary for general excellence.

Bursars—George Bell (English), 1903; William B. Henderson, 1904; Margaret S. M'Leod, 1904.

STILLIE BURSARY IN MUSIC.—This Bursary was founded by Mrs. Thomas Stillie in 1885, the Trustees being the Executive Council of Queen Margaret College, and their successors in office. The Trustees were to apply the annual proceeds of the investment of £125 in

providing one Bursary, to be granted yearly to a student of Music, as a reward for proficiency in Music, and an encouragement to further study. The Trustees were empowered to make such regulations as they should see fit from time to time for testing the merits of the candidates, and also for prescribing the age of candidates and the course of study to be pursued in connection with Queen Margaret College or otherwise, which the Trustees might desiderate as a condition of awarding the Bursary. The University Court, having taken over Queen Margaret College, are the successors in office of the Executive Council of Queen Margaret College in respect of the Stillie Bursary Fund, which in January, 1895, amounted to £160. The following regulations have been adopted by the Court:—

1. The Bursary shall be awarded in connection with the examinations in Music conducted in Glasgow by the Associated Board of the Royal Academy of Music and the Royal College of Music.
2. The Bursary shall be awarded by the Senate on a report by the Examiners of the said Board.
3. Only candidates for the Senior Grade Examination shall be eligible, and the Bursary shall be awarded to the candidate examined in Glasgow who shall obtain the highest number of marks in that examination.
4. The Bursary shall not be awarded if the candidate with the highest number of marks has not obtained honours; and in that case the proceeds shall be added to the capital fund.

Bursar—Sara Kerr, 1905.

DR. STRANG BURSARIES (*Science*).—Mrs. Machen of FernieCraig, Skelmorlie, who died on 15th October, 1894, left funds for the foundation of four Bursaries, each of the annual value of £20, to be instituted in connection with the University of Glasgow, in memory of her brother, the late Dr. John Strang, City Chamberlain of Glasgow from 1834 to 1863. The Trustees under their powers have meanwhile agreed that these Bursaries should be tenable by students of Engineering Science in the University of Glasgow. Each Bursary is tenable for three years. The Bursaries shall be awarded on the results of the Science Preliminary Examination, and no candidate shall be appointed to a Bursary unless he passes the whole preliminary examination. Each Bursar shall be required to attend a course qualifying him for graduation in Engineering Science on the side of Engineering.

The Bursaries shall be payable by equal moieties in the month of January and at the close of the winter session, but the second moiety of the second year's Bursary shall not be paid until the student has passed the first Science Examination for B.Sc. in Engineering Science, except in special circumstances. A student holding another Bursary may, in the discretion of the Trustees, be also appointed to a Strang Bursary.

In each of the years in which two appointments fall to be made, the Trustees, in appointing to the second Bursary, will take into account,

not only the results of the examination, but also, and specially, other circumstances (financial and otherwise) affecting the candidates.

Further particulars may be obtained from Professor Barr, D.Sc., Engineering Department, University of Glasgow, or from Messrs. Kerr & Barrie, Solicitors, 149 St. Vincent Street. (Two vacancies.)

Bursars—¹ Edward A. Smith, 1903; Alexander Gordon, 1904; Thomas Buchanan, 1904; Keningale B. Wright, 1904; John M. Strang, 1905; George Barrett, 1905; Robert Boyle (one year), 1905.

STRUTHERS BURSARY.—(See Gilhagie and Struthers Bursary, p. 329.)

TAYLOR BURSARIES (*Any Faculty*).—Two in number, founded by Mr. James Taylor, writer in Glasgow, who by Trust Disposition and Settlement of date 30th June, 1857, bequeathed to the University the sum of £800 for Bursaries. After Mr. Taylor's death, the trustees found that the estate was not sufficient to pay the various legacies in full. They paid over to the University in January, 1868, the sum of £560, and in September, 1878, a further and final dividend of £80, making in all £640, the free proceeds of which are applied to the payment of the two Bursars. The Senate are Patrons. The preference given to the names Tayler or Taylor, Ronald, Dunlop, Henderson, and M'Arthur, was cancelled by Ordinance No. 57 of the Universities Commission (1889).

Bursars—¹ John Drummond, 1902; George Taylor, 1905.

JAMES THOMSON PHILOSOPHICAL ENTRANCE BURSARY (*Arts, Phil.*).—Founded by subscription in 1878 in memory of James Thomson, M.A., a distinguished student of this University, who died in 1876 before the close of his theological curriculum. The Bursary consists of the proceeds of a sum of about £300, and is tenable for two years. It is awarded biennially for the best examination in (a) Mental Philosophy and (b) English Literature alternately. The examination is open to all students of the first and second year who have not already attended the Logic, Moral Philosophy, or English Literature Class, and who have not attended a session in any other Scottish University. The Bursary is payable in four instalments, but the last instalment will not be paid till the Bursar has passed his examinations in Latin and Greek for the M.A. Degree in Glasgow University. The subjects of Examination in Mental Philosophy and English Literature respectively are the same as for the John Ferguson Jaffrey Bursary. (See page 336.)

The next examination will be held in October, 1906, the subject of examination being English Literature.

WALKINSHAW YOUNG BURSARY (*Law*).—Founded in 1878 by Major Young, Dunmore, Kirn, who bequeathed to the University a sum of £500, free of legacy duty, for promoting any useful branch of Education which the Principal and Professors may think proper.

¹ Vacant through lapse of time.

The following regulations have been adopted :—

1. The Bursary shall be tenable for two years, during which the holder shall give regular attendance as a public student in the Faculty of Law in the University, to the satisfaction of the Senate.

2. All persons who within two years previous to the time when an appointment to the Bursary is made, have, at an examination in Arts, for the Degree of B.L. passed in not fewer than two Arts subjects, or have passed in any two subjects for the Degree of M.A., shall be eligible as candidates, and the Senate shall appoint that one among the candidates who in their opinion is the most distinguished. A student who passes a qualifying Examination in the October of the session in which an appointment is made, shall be held eligible within this rule, but one who has passed an examination in the October two years preceding such an appointment, and has not passed any subsequent qualifying examination, shall not be eligible.

3. The Bursary shall not be tenable along with any other Bursary or Scholarship in the University.

The next appointment to this Bursary will be made in December, 1906. Applications, containing in each case a statement of any distinctions gained by the candidate, to be sent in to the Clerk of Senate on or before 1st December.

Bursar—¹ William S. B. Wilson, M.A., 1904.

WALTON BURSARY (*Medicine*).—This Bursary was founded in 1763 by Dr. William Walton, Huntingdon, for a student in Medicine. The Earl of Sandwich has the right of appointing to the Bursary one of two students nominated by the Senate. Preference is given to "Students of the English Nation." The Bursary may be held for four years. Value about £34 per annum.

Bursar—Morris W. Broudy, 1905.

ANDREW WEIR BURSARY (*Medicine*).—Founded in 1884, in terms of a Bequest by Mrs. Janet Maxwell or Weir, relict of Andrew Weir, feuar in Paisley. Mrs. Weir bequeathed the sum of £500 to the University, and directed the annual income (about £16) to be devoted to maintaining a Bursary in connection with the Medical School, in such a manner as the Senate may appoint. The Bursary is in memory of a son of the founder, Andrew Weir, a medical student of Glasgow University, who held subsequently the post of Resident Physician in the Paisley Infirmary, and in the discharge of his duties there contracted a fever, of which he died. The Bursary is awarded annually at the beginning of the Winter Session, in accordance with the results of the second and third professional examinations, account being taken of the marks gained by all students who have passed both of these examinations within a

¹ Vacant through lapse of time.

period not exceeding thirteen months, reckoning backward from the date of the professional examinations in October of each year. During the tenure of this Bursary, which may be held along with another Bursary, the holder shall be bound to give regular attendance on the classes of the medical curriculum in the University.

Bursar—Peter Mitchell, M.A., 1905.

WILLIAM WHYTE BURSARIES (*Arts, Law, or Medicine*).—Four in number, founded in 1893 in memory of Mr. William Whyte, at one time Preceptor of Hutchesons' Hospital, in accordance with instructions contained in the Trust Disposition and Settlement of his daughter, Mrs. Isabella Whyte or Bamber, who died in 1882. The Trustees executed a Deed of Mortification transferring £2,000, less legacy duty, to Hutchesons' Hospital. The Bursaries are each of the annual value of £25, and are tenable for four sessions in the Faculties of Arts, Law, or Medicine. They are open to competition by boys who have attended and completed the curriculum in the Secondary Department of Hutchesons' Grammar School. Candidates must give in their names to Messrs. Hill & Hoggan on or before 1st September in each year, to be sent to the Clerk of Senate, that they may be entered for the University Entrance Bursary Competition. One Bursary will be awarded every year to the candidate highest in the order of merit who shall not have gained and elected to hold a Bursary of equal or higher value at the general competition, provided his attainments have reached a standard satisfactory to the Patrons of Hutchesons' Hospital.

The sum of £408 15s. 8d. at the credit of the Fund at 31st December, 1892, is to be allowed to accumulate until that sum, with such additions as may accrue from any portion of the income that may not be required for the purposes aforesaid, shall amount to a sum which will produce a return of £20 yearly. There shall then be instituted a Bursary of that value, to be competed for by girls educated in Hutchesons' Girls' School, which Bursary shall be tenable at the University of Glasgow.

Bursars—¹David Manson, 1902; Walter S. L. Dalglish, 1903; William M. Mathieson, 1904; James D. Walker, 1905.

KING WILLIAM'S BURSARIES (*Two in Arts and Two in Theology*).—These Bursaries, founded by his Majesty King William III. in 1695, were formerly six in number and known as the Exchequer Bursaries. They were tenable for six years—the first in Logic, the second in Moral Philosophy, the third in Natural Philosophy, and the last three in Divinity. The bursars in Philosophy received £10 per annum each, and those in Divinity £13 6s. 8d. The Foundation was regulated by Act of Parliament, 1758. By Ordinance No. 99 the Universities Commission (1889) altered the conditions and directions affecting the Foundation, making two Bursaries in the

¹ Vacant through lapse of time.

Faculty of Arts, each of the annual value of £15, and two in the Faculty of Divinity each of the annual value of £20. Each of the Bursaries is tenable for three years, and no longer. The Bursaries in Arts are open by competition to all students entering on their first year of attendance on a course of study for graduation in Arts. The Bursaries in Divinity are open by competition to all students who are Masters of Arts, or who have passed all the examinations necessary for graduation in Arts, and who are entering on their first year of attendance on a course of study for graduation in Divinity. In other respects the provisions of Ordinance No. 57 apply to the Bursaries on this foundation. The Bursaries in Arts are both vacant.

Bursars in Arts—¹Elizabeth F. Stevenson, 1903.

Bursars in Divinity—James F. McCreath, M.A., 1904; John A. Swan, M.A., 1904.

WILLIAMS BURSARIES (*Arts and Theology*).—The Rev. Dr. Daniel Williams, London, who died in 1716, founded bursaries tenable at the University of Glasgow by youths of South Britain, who shall be designed for the Ministry. The appointment rests with Dr. Williams's Trustees, and is made, subject to certain conditions, upon the result of a competitive examination held in London in July. Application for admission to the Examination must be made before the first day of June. Every candidate must satisfy the Trustees that he intends to enter the Protestant Dissenting Ministry. The Bursaries, £40 each per annum, are tenable for three years, but may, in the discretion of the Trustees, be renewed for a fourth year, either to enable the student to take Honours, or to enable him, after graduating, to enter the Divinity Hall. If the Bursary be continued after graduation and held in the Divinity Hall, the amount is raised to £45. Bursars must enter as public students of the University, and must therefore satisfy the requirements as to the Preliminary Examination in Arts, either before the examination in London, or in the next following Preliminary Examination. Prospectus of the Examination and other information may be obtained from the Secretary of the Trust—Francis H. Jones, B.A., Dr. Williams's Library, Gordon Square, London, W.C. (Two appointments in July, 1906.)

Bursars—¹Andrew D. Marcus, 1903; ¹Percy D. Hamilton, 1903; Joseph D. M. Rorke, 1904; Sydney R. Ward, 1904; Charles H. Weaver, 1904; Wilfrid L. Marsh, 1905; ²George Matthew, 1905.

WILSONE BURSARY.—(See Boyd and Wilson, p. 312.)

GEORGE YOUNG BURSARY (*Science*).—By Trust Disposition and Settlement of date 30th August, 1892, Mrs. Catherine M'Farlane or Young, who died at Helensburgh on 4th November, 1893, directed her Trustees to make over to the Senate of the University of

¹ Vacant through lapse of time.

² Appointed under Ord. No. 57, Section xv.

Glasgow the sum of £1,000, free of legacy duty, for the purpose of founding, in memory of her husband and son, a Bursary in connection with the class of Civil Engineering, on such terms and conditions as the Senate should from time to time fix. The Senate have determined that the Bursary shall, upon the recommendation of the Faculty of Science, be awarded to the candidate who has the best record in his First Science Examination. Students who have passed the whole of that examination or at least in Mathematics and Natural Philosophy with or without the higher branches specified in Ordinance No. 23, Section ix., Subsections 1 and 2, may offer themselves as candidates, but students who have completed the qualifying attendance in Engineering shall not be eligible. The Bursary shall be tenable for one year, during which the Bursar must attend a course of Laboratory Practice in Engineering and either a course (or half course) of Engineering Lectures or a course of Engineering Drawing. Appointment in the month of October.

Bursar—¹ Thomas B. Maxwell, 1905.

MAJOR YOUNG'S FUND BURSARIES (*Law*).—Two in number, founded in 1890 by the Trustees of the late Major Young, founder of the Walkinshaw Young Bursary. The amount of the Bursary Fund is about £1,312, and each of the Bursars receives one half of the free annual income thereof. In accordance with Major Young's desire, the Bursaries are open only to applicants whose pecuniary circumstances are such as in the judgment of the Senate render it desirable that they should have assistance in prosecuting their studies at the University, preference being given, *ceteris paribus*, to natives of Argyllshire or Renfrewshire. One of the Bursaries is tenable for six years, and is awarded by competitive examination to a student of the first year who intends to study for a Degree in Law. The Bursar is required during his tenure of the Bursary to attend such classes and to pass such examinations for a Degree in Law as shall be held by the Senate to correspond to the successive stages of his course and he must attend a class or classes in the Faculty of Law during at least the last two years of his tenure of the Bursary. The other Bursary is tenable for two years, and is awarded by competitive examination upon subjects prescribed by the Senate. Candidates must have expressed their intention of attending the classes of Scots Law and Conveyancing, and the Bursar must attend these classes in separate sessions during his tenure of the Bursary. Either of these Bursaries may be held with any other Bursary, Scholarship, or Prize in the University, but both shall not be held together by one Bursar. The subjects of examination are those prescribed for the General Bursary competition. (One vacant.)

Bursar—Robert Gibson, 1904.

¹ Vacant through lapse of time.

2. EXHIBITIONS, FELLOWSHIPS, AND SCHOLARSHIPS.

ALPHABETICALLY ARRANGED.

N.B.—In cases in which a Scholarship or Fellowship falls vacant otherwise than by lapse of time, the Senate may, except where it is inconsistent with the deed of foundation, hold a competition, and make an appointment for the remainder of the period for which such Fellowship or Scholarship may be held. At the next ordinary competition no student shall be excluded from the competition by reason of his having previously been appointed to fill a vacancy for less than the full period; but in no case shall any student hold such Scholarship or Fellowship for longer than the full period fixed in the regulations applicable to such foundation.

FOUNDATION.	No. of Scholarships, &c.	TENABLE BY	Approximate Annual Value of each.
Black Theological, -	1	Masters of Arts of Scot. Univ.,	£133
Breadalbane, - - -	2	M.A. or B.Sc., Eng., Glas. Univ.,	£55
Clark, George A., - -	4	3 M.A., 1 M.A. or B.Sc., do.	£168
Clark, John (Mile-end),	12	Arts Students at close of Curric.,	£50
Coats Memorial, -	1	Medical Graduates of Glas. Univ.,	£80
Donaldson, Alexander,	1	Candidates for B.Sc. (Chemistry),	£42
Donaldson, Robert, -	2	Bachelors of Science of Gl. Univ.,	£64
Eglinton, - - - -	2	Masters of Arts of do.	£65
Ewing, William, - -	3	Do. do.	£100
1851 Exhibition Science	2	Science Students, - - -	£150
Ferguson, - - - -	6	Masters of Arts of Scot. Univ.,	£80
Foulis Memorial, - -	1	Medical Graduates or Licentiates,	£50
Grocers Company, -	2	Research Stud. in Public Health,	£300
Houldsworth, - - -	1	Research Students in Nat. Phil.,	£150
Lloyd's Register, - -	3	Students of Naval Architecture,	£50
Luke, - - - - -	1	Masters of Arts of Glas. Univ.,	£95
Mackay Smith, - - -	2	Students in Nat. Phil. and Chem.,	£48
Mackinnon, - - - -	1	(See page 390),	£56
Metcalfe, - - - - -	1	Masters of Arts of Glas. Univ.,	£100
Mining, - - - - -	2	Graduates in Science, - -	£50
Reid-Stewart, - - -	1	Masters of Arts of Glas. Univ.,	£56
Sandford, - - - - -	1	Greek Students, do.	£20
Scott (Sir Walter), -	1	Masters of Arts of do.	£80
Shaw Philosophical, -	1	Do. Scot. Univ.,	£140
Snell (at Oxford), - -	5	Masters of Arts, etc., Glas. Univ.,	£80
Thomson Experimental	3	Students of Natural Philosophy,	£20
Watt, James, - - -	1	Bachelors of Science, - - -	£38

BLACK THEOLOGICAL FELLOWSHIP.—This fellowship, which is now of the annual value of £133, was instituted under the Will of the late Mrs. Janet Black (who died in 1876) in memory of her husband, the Rev. William Black, D.D., minister of the Barony Parish of Glasgow. Candidates must be members of the Established Church of Scotland.

The following regulations have been adopted by the Senate with the sanction of the University Court :—

1. The Black Theological Fellowship shall be tenable for one year.
2. It shall be awarded by competition open to Masters of Arts from any of the Universities of Scotland completing the ordinary curriculum of Theological study in the University of Glasgow in the academical year in which the examinations are held.

3. The subjects of examination shall be the same as those prescribed for the Degree of B.D., and the examinations shall be held at the same times as the examinations for the Degree of B.D.

4. The Fellowship shall be awarded by the Theological Faculty at the close of the winter session to the most distinguished graduate in Divinity of the session qualified in terms of the foundation, but the Fellowship shall be awarded only if the Candidate has, in the opinion of the Faculty, attained a sufficient standard of merit.

5. The holder of the Fellowship shall, during the tenure of it, perform such duties—whether in the form of giving a short course of lectures, or of undertaking tutorial work, or otherwise—within the University, as may be assigned to him by the Faculty of Theology with the sanction of the Senate.

6. The Fellowship shall not be held in conjunction with any other Theological Fellowship or Scholarship or Prize falling to be awarded at the same time, or subsequently during its tenure.

Subject to these regulations an appointment to the Fellowship will be made in April, 1906.

Present Fellow—John A. G. Thomson, B.D., 1906.

BREADALBANE SCHOLARSHIPS.—The second Marquis of Breadalbane, an alumnus, and afterwards Rector of the University, gave from the first year of his Rectorship (1840-41), and during his lifetime, the sum of £100 annually, which was for some years distributed in prizes among certain classes, and afterwards appropriated to the establishment of two Scholarships, the one in Mathematical and Physical Science, and the other in Mechanical Philosophy, Chemistry, and those branches of Natural History that are connected with the Arts and Manufactures.

The Marquis died in 1862, and his Deed of Settlement made provision for the “annual payment, in all time coming, to the University of Glasgow, of the sum of £100, to be paid yearly to deserving students in this college, as scholarships or Bursaries, to be called the ‘Breadalbane Scholarships,’ in such manner as shall be fixed by the *Senatus Academicus* of the said University.”

The following regulations have been approved by the Senate:—

The number of Scholarships shall be two, of £50 each per annum, for the encouragement of pure and applied Science.

The scholars shall be chosen, after competitive examination in Mathematics and Natural Philosophy, from among candidates who shall have taken the Degree of Master of Arts, or the Degree of Bachelor of Science in the Department of Engineering Science, at the University of Glasgow, within a period of not more than three years preceding the examination; provided always that students graduating at the supplementary graduation in November of any year, shall, for all purposes, be held to have graduated at the ordinary graduation in April immediately preceding.

Each scholar shall pursue such course of scientific study during the

tenure of his Scholarship as the Senate shall in each case prescribe, and shall hold his Scholarship for three years ; provided that at the end of the first and second years he give the Senate such evidence, by examination or otherwise, as the Senate shall deem sufficient, of having successfully prosecuted the prescribed course of study. The annual value of each Scholarship is now £55.

Scholars—Robert Harvie, 1904 ; Gilbert P. Hogg, 1904.

CARNEGIE FELLOWSHIPS AND SCHOLARSHIPS.—See pp. 175-182.

GEORGE A. CLARK BURSARIES OR SCHOLARSHIPS.—By the Will of the late Mr. George A. Clark, manufacturer, Paisley, a sum of £20,000 was bequeathed in 1872 to this University for the creation of four Bursaries, tenable each for four years. The following are the regulations :—

1. One of these Bursaries shall be competed for annually, at or immediately after the October examination for Degrees in Arts or Science.

2. The four Bursaries are assigned respectively to four of the Groups of Honours enumerated in Ordinance No. 11, Section XI., of the Universities Commission (1889), viz. :—(1) Classics ; (2) Mental Philosophy ; (3) Mathematics and Natural Philosophy ; (4) English (Language, Literature, and British History).

For the Classics Bursary or Scholarship either Masters of Arts of this University who have taken the Degree of M.A. with Honours, or students presenting themselves for the final examination for the M.A. Degree with Honours in Classics, may be candidates ; for the Mental Philosophy Bursary or Scholarship, either Masters of Arts of this University who have taken the Degree of M.A. with Honours, or students presenting themselves for the final examination for the M.A. Degree with Honours in Mental Philosophy, may be candidates ; for the Bursary or Scholarship in Mathematics and Natural Philosophy either Masters of Arts of this University who have taken the Degree of M.A. with Honours, or students presenting themselves for the final examination for the M.A. Degree with Honours in Mathematics and Natural Philosophy, or Bachelors of Science of this University who have taken the Degree of B.Sc. in Pure Science, or students presenting themselves for the final examination for the B.Sc. Degree in Pure Science in the subjects of Mathematics and Natural Philosophy, may be candidates ; and for the Bursary or Scholarship in English either Masters of Arts of this University who have taken the Degree of M.A. with Honours, or students presenting themselves for the final examination for the M.A. Degree with Honours in English, may be candidates.

But no student shall be eligible for the examination after the expiration of more than eight winter sessions from the time of his first entering a class qualifying for the M.A. Degree or the B.Sc. Degree.

3. The successful candidate shall undertake, during his tenure of the Bursary, to give such assistance in the teaching work of the University, and to follow such a course of study in the University, as the Senate may determine.

4. The subjects of examination each year shall be those which constitute the examination for Honours in one of the above-named Groups (the Group selected each year for examination to be publicly announced). The Senate reserve the right to withhold the Scholarship, should none of the Competitors reach the standard of attainment required of graduates in Arts with highest honours.

5. In the event of the examiners reporting in any year that no candidate has done sufficiently well in the subjects of that year to deserve the Scholarship, no appointment shall be made in that year; but it shall be in the power of the Senate to hold an examination for the same Scholarship, and in the same subjects, in the following year; provided that in that case the Scholarship shall be held for three years only and not for four, the surplus revenue being added to the capital of the fund. Should the same thing occur again, it shall be in the power of the Senate to appoint a Scholar for two years only, or for one year only, the examination in each case being in the same subjects as when the Scholarship was first competed for. In the same manner, in the event of a vacancy occurring in the tenure of any of the Scholarships otherwise than by lapse of time, the Senate may make an appointment for the remainder of the term for which the Scholarship might have been held by the student vacating it, and after examination in the same subjects as those for proficiency in which the Scholar was originally appointed; but in no case shall the regular rotation of subjects as above provided for be disturbed. In the competition for Scholarships to be held for less than four years, no student shall be admitted to examination who would not be eligible, as above arranged, for a Scholarship to be held for four years. In the event of a candidate being appointed to a vacancy to be filled for less than four years, and being still eligible, under the usual regulations as above, to compete for the said Scholarship on the occasion of the next regular vacancy, he shall be qualified to compete just as if he had not previously held the Scholarship, but in no case shall any student be permitted to hold the Scholarship for more than four years in all.

6. It shall not be competent for the holders of these Bursaries to hold any other Bursary or Scholarship in this University.

7. It shall be in the power of the Senate to deprive any Bursar of his Bursary, in the event of his not complying, to their satisfaction, with any of the above regulations.

8. The Examiners shall be the same as the Examiners for the Degree of M.A. with Honours in each of the several departments, and for the Degree of B.Sc.

One of these Bursaries or Scholarships will be competed for, subject to the foregoing regulations, in October, 1906. It will be tenable for four years, and the examination will be in the second of the four groups above enumerated, viz., Mental Philosophy.

Candidates are requested to give in their names to the Assistant Clerk (Matriculation Office), not later than 19th September.

Bursars—¹John W. Scott, M.A. (two years), 1904 (Mental Philosophy); William Miller, M.A., 1903 (Math. and Nat. Phil.); Robert Dewar, M.A., 1904 (English); William Manson, M.A., 1905 (Classics).

JOHN CLARK (MILE-END) SCHOLARSHIPS.—By the Deed of Constitution regulating the John Clark Bursaries (see page 315), the Founder, Mr. John Clark, also instituted Scholarships of £50 annual value, open for competition to all Protestant students of good moral character, sons or daughters of Protestant parents, and who have completed their curriculum in Arts in Glasgow University. The Scholarships are to be awarded to the candidates who stand highest at written examinations in the branches of learning appointed by the trustees, and are tenable for four years, subject to the condition that the Scholars give their undivided time and attention to the prosecution of their studies with a view to any of the learned professions, or, on approval of the trustees, any other profession or business they may prefer. The trustees have resolved that they will not, in ordinary circumstances, appoint to a Scholarship any one who holds a Scholarship of equal or greater value, and that no student shall be eligible for the examination after the expiry of more than eight winter sessions from the time of his first entering a qualifying class. Three Scholarships are offered for competition in October, 1906 (each tenable for four years), one in the Group of Economic Science, one in the Group of Classics, and one in the Group of Mental Philosophy. The examination will be on the subjects prescribed for the Degree of M.A. with Honours in the respective Groups.

Names of candidates to be given in to the Assistant Clerk (Matriculation Office), and also to Mr. Kidston, 50 West Regent Street, Glasgow, on or before the 19th September.

Scholars—George Stewart, 1903 (History); Constance H. M. Archibald (three years), 1904 (Economic Science); Robert N. Cross, 1904 (Mental Philosophy); John F. Tinto, 1904 (Math. and Nat. Phil.); James R. Buchanan, 1904 (Semitic Languages); Isabel M. Milligan, 1905 (English); Annie M. Macgregor, 1905 (Modern Languages); Margaret T. Robertson, 1905 (History).

¹ Vacant through lapse of time.

JOSEPH COATS MEMORIAL SCHOLARSHIP.—Founded in 1900 by the friends of the late Professor Coats, as a memorial of his distinguished services to Pathological Science, and in recognition of the ability and enthusiasm which he devoted to advance the teaching of the subject in Glasgow. The Scholarship is for the encouragement of original research in Pathology, is awarded biennially, and is tenable for one year. The Committee of subscribers paid over to the University Court £1,200, to the free proceeds of which for the two preceding years the Scholar is entitled during his year of tenure. Candidates must be graduates in Medicine in the University of Glasgow of not more than three years standing. The Scholarship will be awarded by the Senate on the results of a practical examination in Pathology, conducted by the Professor of Pathology with the assistance of two other members of the Faculty of Medicine to be appointed by the Senate in the beginning of October of every second year. The successful candidate must, for nine months following the award, prosecute research in Pathology with the Pathological Institute at the Western Infirmary, or in a Laboratory elsewhere approved of by the Faculty of Medicine, and shall not engage in Medical or Surgical practice during that period. The next appointment will be made in the beginning of session 1907-8.

Scholar—William B. M. Martin, M.B., Ch.B., 1905.

ALEXANDER DONALDSON SCHOLARSHIP OR BURSARY.—Founded in 1881 by Will of the late Mr. Alexander Donaldson, iron merchant in Glasgow, who bequeathed to the Senatus of Glasgow University £1,000, to be administered by them as patrons for the endowment of a Scholarship or Bursary, at their discretion, in connection with the said University.

The following regulations were adopted by the Senate on 1st May, 1884 :—

1. The Scholarship shall be awarded to the candidate who, presenting himself for the first examination for the Degree of B.Sc. held in the month of April, shall stand highest in Chemistry.

2. The Scholarship shall be tenable for two years.

3. The second moiety of the second year's stipend shall be paid only after the Scholar has passed all the examinations for the Degree of B.Sc.

These regulations apply to students proceeding to the Degree of B.Sc. under the new regulations for that Degree.

The next appointment will be made after the B.Sc. examination in April, 1908.

Scholar—James Kirkland, 1906.

ROBERT DONALDSON SCHOLARSHIPS.—Founded in 1887 by the trustees of the late Mr. Robert Donaldson, iron merchant, Glasgow,

who left £2,000 to the Senate for two Scholarships for such scientific purposes as the trustees should approve. The following tentative scheme has been approved by the trustees :—

1. The income of the fund shall be devoted for two years alternately to Scholarships in Chemistry and Biology.

2. Each Scholarship shall be tenable for two years.

3. Students who have taken the Degree of B.Sc. in Glasgow University shall be eligible.

4. The appointment shall be made by the Senate on a report as to the merits of the candidate or candidates by the Professor of the subject.

5. The scholar appointed shall devote himself for two years in this University, or for one year in this University and the other in such place as the Senate may approve, to research in the subject in which he has obtained the Scholarship. The holder of the Scholarship in Biology shall have the option of selecting Zoology or Botany as the subject of research.

6. The Senate are not bound to make an appointment unless the candidate is in their opinion qualified.

The appointment in November, 1906, will be in Biology.

Scholar—David Thomson, M.A., B.Sc. (one year), 1906.

EGLINTON FELLOWSHIPS.—On the death of the Earl of Eglinton, formerly Rector of the University of Glasgow, a committee was formed to collect subscriptions for the purpose of commemorating in a suitable manner his virtues and public services; and, subscriptions having been received to the amount of £7,000, it was resolved by the subscribers, in 1862, to set apart £4,500 out of this sum as a Scholarship or Fellowship Fund in the University of Glasgow.

By the Trust Deed of date November 8th, 1865, the net yearly produce of the said sum (after deducting expenses) is to be appropriated to the support of one or more Fellowships, not exceeding three, to be competed for by the alumni of the College of Glasgow, and to be held for a period not exceeding four years, upon the following conditions, viz.: First,—The number of Fellowships, and the period during which the same are to be held, shall from time to time be fixed by the Senatus Academicus of the said University. Secondly,—The competition for the Fellowships shall be open only to deserving students who shall have taken the Degree of Master of Arts in that University at the term preceeding the competition, and the Fellowships shall be awarded by the Senatus Academicus of the University to those students who have shown themselves in a public competition to have acquired the greatest amount of knowledge and proficiency in the branches of study embraced in the curriculum of Arts, and such branches of Natural Science as the Senate shall, from time to time, require. And, Thirdly,—The Examination for the Fellowships shall be under the direction of the Senatus Academicus

of the University, who shall fix the subjects of examination, and the relative value of each subject in the competition, and appoint any of their own number, or other fit persons, to be Examinators, and make such regulations with relation to the said Fellowships, and the competition and examination therefor, as from time to time they may think fit.

The following are the regulations of the Eglinton Fellowships :—

1. The number of the Eglinton Fellowships shall be two (of about £65 per annum each), tenable for three years, subject to the approval of the Senate at the end of the first and second year.

2. The competition for the Fellowship shall be open only to deserving students who shall have taken the Degree of Master of Arts in the University of Glasgow, at the term preceding the competition.¹

3. One of the Fellowships shall be open to competition in October, 1866, and thereafter triennially (1908); and the other in October, 1867, and thereafter triennially (1906).

4. The successful candidate shall undertake, during his tenure of the Fellowship, to follow such a course of study in the University, or to give such assistance in the teaching work of the University, as the Senate may determine.

5. The Examination for the Eglinton Fellowship to be competed for in October, 1890, and thereafter sexennially (1908), shall be in Classics; and the Examination for the Eglinton Fellowship to be competed for in 1893, and thereafter sexennially (1911), shall be in Mental Philosophy.

The subjects of examination in Classics and Mental Philosophy respectively shall be the same as those for the Degree of Master of Arts with Honours.

6. The Examination for the Eglinton Fellowship to be competed for in October, 1897, and thereafter sexennially (1909), shall be in Mathematics and Natural Philosophy; and the Examination for the Eglinton Fellowship to be competed for in October, 1900, and thereafter sexennially (1906), shall be in English (Language, Literature, and British History).

The subjects of examination in Mathematics and Natural Philosophy and in English respectively shall be the same as those for the Degree of Master of Arts with Honours.

7. The Eglinton Fellowship shall not be held along with the Snell Scholarship, or Breadalbane Scholarship, and the holder of the Luke Fellowship or of the Metcalfe Fellowship shall not be admitted to compete for the Eglinton Fellowship.

The next ordinary competition will take place in October, 1906, the subject of examination being English (Language, Literature, and British History).

¹ i.e. Either at the ordinary graduation in April or at the supplementary graduation in November.

Fellows—¹Samuel N. Forrest, M.A., B.Sc., 1903 (Mathematics and Natural Philosophy); Henry M. Trafford, M.A., 1905 (Mental Philosophy).

WILLIAM EUING FELLOWSHIPS.—Founded in 1874 by Mr. William Euing, insurance broker, Glasgow, who by his Will bequeathed to the University, along with a library of rare and valuable books, the sum of £6,000 for the endowment of three Fellowships, each of the value of £80 per annum, and tenable for not more than five years. The Fellowships are open only to deserving students who have completed the regular curriculum in Arts, and taken the Degree of M.A. at this University, and are awarded after competition in the subjects of the Arts curriculum. The Fellows are required to reside in Glasgow for at least nine months in the year, and “to open private classes of limited numbers, for giving instruction to, and aiding students of the University—more especially during the vacation, or such part thereof as may be found expedient—in such studies as may be auxiliary to, or illustrative of, the course of lectures which such students may have attended, or be desirous of attending, and also to carry out the same purpose by a systematic course of private tuition.”

One Fellowship is attached to the department of Classics, one to the department of Mathematics and Natural Philosophy, and one to the department of Mental Philosophy, including Logic, Moral Philosophy, and English Literature.

The Senate have issued the following regulations for the competition for these Fellowships:—

1. In the department of Classics there shall be one Fellowship competed for in October, 1875, and thereafter at intervals of four years (1907), the period for which the Classical Fellowship shall be ordinarily tenable.

2. In the department of Mental Philosophy one Fellowship shall be competed for in October, 1876, and thereafter at intervals of three years (1906), the period for which the Fellowship in the department of Mental Philosophy shall be ordinarily tenable.

3. In the department of Mathematics and Natural Philosophy one Fellowship shall be competed for in October, 1875, and a Fellow appointed for two years; the Mathematical Fellowship becoming vacant in October, 1877, shall be filled up for a period of three years, the period for which the Fellowship in this department shall be ordinarily held.

In the event of a candidate being appointed to a vacancy to be filled for less than four years in the department of Classics, or for less than three years in the department of Mental Philosophy, or of Mathematics and Natural Philosophy, and being still eligible, under the usual regulations as above, to compete for the said Fellow-

¹ Vacant through lapse of time.

ship on the occasion of the next regular vacancy, he shall be qualified to compete just as if he had not previously held the Fellowship, but in no case shall any student be permitted to hold the Fellowship for more than four years in all, or three years in all, respectively.

Fellows—Robert K. Goodfellow, M.A., 1903 (Classics); ¹Archibald A. Bowman, M.A., (1905), 1903 (Mental Philosophy); Thomas M. M'Robert, M.A. (1905), 1904 (Math. and Nat. Phil.).

EXHIBITION (1851) SCIENCE RESEARCH SCHOLARSHIPS.—Her Majesty's Commissioners for the International Exhibition of 1851 have instituted Science Scholarships, each of the annual value of £150, and tenable for two years, subject to the scholar's first year's work being deemed satisfactory by the Scientific Committee of the Commissioners. The nomination to a Scholarship has been placed at the disposal of this University in each year since 1891, and it is anticipated that similar arrangements will be made in future years.

Candidates must be British subjects, and must have been students of Science in some approved institution or institutions for a period of three years, at least the third year of the period having been spent in this University. Capacity for original research tending to advance Science or its applications is required as the main qualification. The Scholarships may be held at any University in England or abroad, or in some other institution approved of by the Commissioners; and every scholar will, in the absence of special circumstances, be required to proceed to an institution other than that by which he is nominated. He must devote himself to some particular scientific work in connection with those branches of Science, such as Physics, Mechanics, and Chemistry, the extension of which is especially important to our national industries. A sum of £25 is reserved from the fourth half-yearly instalment, and paid by the Commissioners on receipt from the Scholar, after the expiration of his Scholarship term, of a satisfactory report of his study and research during the term.

When a nomination falls to be made in any year, due notice will be given to enable candidates to lodge their applications with the Clerk of Senate before the middle of March. Every application must be accompanied by a statement of the scientific study (including original research) in which the candidate has been engaged, and of the work to which he proposes to devote himself if appointed to the Scholarship.

Scholars—John Miller, M.A., 1905; Robert Jack, M.A., B.Sc., 1906.

FERGUSON SCHOLARSHIPS.—With a view to the encouragement of the higher learning in Scotland, the trustees of the late Mr. Ferguson, of Cairnbrock, out of his legacy of £50,000 for educational and other purposes, instituted in 1860 six Scholarships, each of the value of £80 per annum, to be held for two years, and to be called "The Ferguson Scholarships."

¹ Vacant through lapse of time.

The examination of candidates for three of these Scholarships will be held in Glasgow, on Tuesday, 25th September next, and two following days. One of the Scholarships will be awarded for the greatest proficiency in Classics; one for the greatest proficiency in Mathematics, including Natural Philosophy; and one for the greatest proficiency in Mental Philosophy, including Logic, Psychology, Metaphysics, Moral Philosophy, and History of Philosophy.

Subjects for examination—

CLASSICAL SCHOLARSHIP.—Latin Prose Composition; Latin Translation; Greek Prose Composition; Greek Translation. General—(a) Critical; (b) Greek and Latin History; (c) Greek and Latin Literature. Verse Composition, either in Greek or Latin; or an original Latin Essay on some subject connected with Ancient History, Literature, or Life.

MATHEMATICAL SCHOLARSHIP.—*Mathematics*—Euclid's Elements. Modern Geometry. Algebra, including Determinants, Finite Differences, and Theory of Equations. Trigonometry, Plane and Spherical. Analytical Geometry, in two and three dimensions. Differential and Integral Calculus, and Differential Equations.

Natural Philosophy.—Abstract Dynamics (commonly called Mechanics), including Kinematics and Statics and Kinetics of Solids and Fluids. Acoustics, Heat, Light, Magnetism and Electricity, treated both mathematically and experimentally.

Candidates will be allowed a choice of questions, and may obtain full marks by showing good general knowledge and an intimate acquaintance with any branches they may have specially studied.

PHILOSOPHICAL SCHOLARSHIP.—*Logic.*—Province and History of Logic. Notions, Judgments, and Inferences. Recent developments of Formal Logic. Fallacies. Theory and Methods of Scientific and of Historical Proof.

Psychology and Metaphysics.—The Phenomena and Laws of Mental Life and of its Development. Theory of Knowledge. Theory of Reality.

Moral Philosophy.—Psychology and Metaphysics of Ethics. Relations of Ethics to Law, Politics, and Economics. Applied Ethics.

History of Philosophy.—History and Critical Analysis of Ancient and Modern Systems of Philosophy.

The competition will be open to all persons who have passed the Examinations required for the Degree of Master of Arts in one of the Universities of Scotland (whether taking the Degree at the same time or not), provided that, at the time of the competition, not more than six years have elapsed since the date of their first entering a class qualifying for the M.A. Degree, and who have not already gained one of these Scholarships.

The Examinations will be conducted in writing, and the Scholarships awarded on the report of the Examiners as to the merit of the Candidates, but the minimum of 60 per cent. of the possible marks must be reached in order to entitle to a Scholarship.

The Scholarships, of £80 each per annum, are tenable for two years, subject to fulfilment of the following rule of the trustees:—

“Persons gaining the Scholarships will be expected, during the “tenure thereof, to prosecute studies in furtherance of the higher “learning; and those who have not graduated shall be required to “do so before the last payment is made.”

Certificates will be granted to such of the unsuccessful competitors as, in the opinion of the Examiners, shall have taken a distinguished position in the Examinations.

Candidates are requested to give in their names, personally or by letter, at the office of THE FERGUSON BEQUEST FUND, 94 Bath Street, Glasgow, before 1st September, 1906, and due intimation will be sent to those enrolled as to the place and hours of Examination.

The following Students of the University of Glasgow have obtained Ferguson Scholarships:—

1868, James Smith, Mathematical; 1869, Archibald B. Cameron, Philosophical; 1870, John Cross, Classical; 1870, James Orr, Philosophical; 1872, Wm. W. Waddell, Classical; 1873, Thomas H. Miller, Mathematical; 1874, William Patrick, Philosophical; 1875, William Y. King, Classical; 1878, John M^cA. Dodds, Mathematical; 1878, Thomas B. Kilpatrick, Philosophical; 1882, Robert F. Muirhead, Mathematical; 1883, James A. M^cCallum, Philosophical; 1886, James Buchanan, Mathematical; 1886, Andrew F. Smith, Philosophical; 1888, Ernest F. Scott, Classical; 1889, Evan Keri Evans, M.A., Philosophical; 1890, Abraham Levine, M.A., Mathematical; 1891, James Holm, M.A., Mathematical; 1893, Horatio S. Carslaw, M.A., Mathematical; 1897, William Boyd, M.A., Philosophical; 1898, George D. Valentine, M.A., Mathematical; 1899, Robert D. Bell, M.A., Classical; 1900, David K. Picken, M.A., Mathematical; 1901, David M. Stewart, M.A., Mathematical; 1901, Alexander D. Lindsay, M.A., Philosophical; 1902, Francis P. H. Stirling, M.A., Mathematical; 1905, John Waugh Scott, M.A. Philosophical.

Present Holders of the Scholarships.—Alexander Petrie, M.A., of Aberdeen University, Classics, 1904; Edward B. Ross, M.A., of Edinburgh University, and Peter Fraser, M.A., of Aberdeen University, Mathematics, 1904; Jessie E. Murdoch, M.A., of Aberdeen University, Mental Philosophy, 1904; John Fraser, M.A., of Aberdeen University, Classics, 1905; John Gray, M.A., of Aberdeen University, Mathematical, 1905; John W. Scott, M.A., of Glasgow University, Mental Philosophy, 1905.

FOULIS MEMORIAL SCHOLARSHIP.—This Scholarship was founded in 1882 in memory of the late David Foulis, M.D., Glasgow, who had distinguished himself in Pathology and Surgery, and died at the age of 35 years. It is to be awarded as often as the accumulated income from the invested funds amounts to £50. The next vacancy

will take place in September, 1906. It is tenable by a graduate or licentiate whose professional education has, to the extent of not less than two years, been received at the University or one of the extra-mural schools of Glasgow; and who shall, in the opinion of the trustees, have manifested a capacity for original work in the department of Pathology. The purpose of the Scholarship is to assist in the prosecution of such work in one of the Medical Schools in or furth of Scotland, approved of by the trustees; and the trustees have power to determine whether it should be awarded by competition or otherwise.

The trustees are the Professor of Practice of Medicine in the University, the President and Visitor of the Faculty of Physicians and Surgeons of Glasgow, and the Pathologists of the Western and Royal Infirmaries. Further particulars may be obtained from Messrs. J. M. Taylor, Foulis & Co., 180 St. Vincent Street.

Scholar—John M. Cowan, M.D., D.Sc., 1903.

THE GROCERS' COMPANY'S SCHOLARSHIPS.—The Grocers' Company of London, with the object of encouraging Original Research in Sanitary Science, offer annually to British subjects, under thirty-five years of age, two Scholarships, each of £300 a year, with an allowance to meet the cost of apparatus and other expenses in connection with the work, tenable for one year from the first day of June, and renewable for a further period of one year or of two years. Candidates are required to state the nature of the research proposed, and no subject which does not come, broadly speaking, under the category of an inquiry into the Causation of Prevalent Disease or as to Means of Prevention of Premature Death will be considered eligible. When a vacancy occurs applications should be sent in before the first day of April to the Clerk of the Grocers' Company, Grocers' Hall, London, E.C., from whom a form of application and further information may be obtained.

WILLIAM HOULDSWORTH RESEARCH STUDENTSHIP.—In March, 1898, the late William Houldsworth, merchant in Glasgow, in recognition of the distinguished services of his friend, Lord Kelvin, to the cause of scientific research, made over to the University the sum of £5600 invested in Great Eastern Railway Four per cent. Debenture Stock, to provide a Research Studentship in connection with the Faculty of Science. Candidates must be students of at least two years' standing in the University of Glasgow. The studentship is tenable for two years, and the holder must prosecute his work with diligence and regularity so as to receive from the Professor of Natural Philosophy a certificate of creditable success. A proportion, viz., four-fifths, of the annual income is payable without deduction to the Research Student for personal expenses, and the remaining fifth part, after meeting the expenses of administration, is applied in payment of laboratory expenses and materials in con-

nection with the Research Student's work, and in payment of his matriculation fees and of the fees for such Science Classes, if any, at the University as he may attend with the approval of the Senate. The said one-fifth part of the income must be expended at the sight and to the satisfaction of the Professor of Natural Philosophy or upon orders granted by him, and the Research Student is required to furnish the Professor with a statement showing the sums so expended in each session, and also during his tenure of the Studentship. Any surplus remaining over shall be added to the principal of the fund. In the event of the Studentship falling vacant otherwise than by lapse of time, the Senate may immediately make another appointment for a period not exceeding two years, and in the event of the Senate considering it not advisable at any time to make an appointment on the occurrence either of a casual vacancy or of a vacancy in regular course, the same may be deferred, and the income thus left unused shall be added to the principal of the fund.

When a vacancy occurs, the applications of candidates must set forth the particulars required by Ordinance No. 61, Section III. See page 164.

Research Student—

LLOYD'S REGISTER SCHOLARSHIP — In 1889 the General Committee of Lloyd's Register of British and Foreign Shipping intimated their intention of establishing a Scholarship of the yearly value of £50, tenable for three years by students of Naval Architecture in this University. In 1893 two additional Scholarships, each of the same value and tenure of the first, were announced. They are open to competition to candidates whose age does not exceed 23 years. Each candidate must produce satisfactory evidence that £50 a year would enable him to pursue his studies, and that he would be unable to do so unless this aid were afforded. The subjects of examination are the following :—Euclid, Books I. II. III. IV. VI. and XI.; Algebra, including Quadratic Equations, the three Progressions, and Binomial Theorem; Plane Trigonometry, with use of Logarithms; Elements of Statics, Dynamics, and Hydrostatics; Practical Shipbuilding; Mechanical Problems. A preference will be given to a candidate who possesses a thorough grammatical knowledge of English and of either French or German, although he may be somewhat deficient in the other subjects prescribed. One Scholarship will be open to competition in October, 1906. Names of Candidates to be sent to the Assistant Clerk (Matriculation Office) on or before 19th September, 1906.

Scholars—William Thomson, 1904; Ernest Sutton, 1905.

PATRICK A. LOWSON MEMORIAL SCHOLARSHIP—1873.—Capital Funds, £2,100. The Scholarship is tenable for two years, and is

worth, subject to certain conditions, not less than £60 per annum, and is at present £70 per annum. Candidates must have attended three years, not necessarily consecutive, at a school or schools in Dundee or Broughty Ferry, and may have attended, for not more than one session, any University or College in the United Kingdom. Trustees, the Parish Minister of Dundee, the Lord Provost of Dundee, the President of the Chamber of Commerce (*ex officio*), and William Lowson, J. G. F. Lowson, J. C. Buist, Robert B. Don, George K. Smith, Charles G. Gourlay, and Archibald W. Sturrock. Factor, Robert Morton, Savings' Bank, 2 Euclid Street. The next vacancy occurs in September, 1906.

LUKE FELLOWSHIP.—In 1863, the late William Luke, Esq., of Edinburgh, bequeathed to the University of Glasgow the sum of £3,000 sterling, "to perpetuate the memory of his nephew George Rankin Luke" (formerly a highly distinguished student of this University, and afterwards student of Christ Church, Oxford), "in such a manner as his esteemed friend, Professor Nichol, may consider most beneficial." Professor Nichol exercised the discretionary power thus conferred on him by directing that the sum bequeathed should be applied to the founding of a Luke Fellowship. The following are the regulations:—

1. There shall be a single Luke Fellowship (of about £95 per annum), tenable for three years, subject to the approval of the Senate at the end of the first and second years.

2. The Luke Fellowship shall be awarded on examination on English Literature, and on prescribed periods in History.

3. The Luke Fellowship shall be open to competition in October, 1868, and thereafter triennially.

4. Competitors for the Luke Fellowship must be Masters of Arts of this University, of not more than three years' standing; provided always that students graduating at the supplementary graduation in November of any year shall, for all purposes, be held to have graduated at the ordinary graduation in the April immediately preceding.

5. The Luke Fellowship shall not be held along with the Snell Scholarship, the Clark Scholarship, the Eglinton Fellowship, or the Euing Fellowship.

6. Students who have competed at one Luke Fellowship Examination shall not be admitted to another, nor shall the holder of the Eglinton Fellowship; but in the event of a candidate's being appointed to a vacancy to be filled for less than three years, and being still eligible, under the usual regulations as above, to compete for the Luke Fellowship on the occasion of the next regular vacancy, he shall be qualified to compete just as if he had not previously held the Fellowship, but in no case shall any student be permitted to hold the Fellowship for more than three years in all.

Ordinance No. 100 of the Universities Commission (1889) prescribes that the provisions of Ordinance No. 57 shall apply to the Luke Fellowship, but provides that it shall not be a condition of tenure of the Fellowship that the holder shall give assistance in teaching the class of English Literature.

The next competition for the Luke Fellowship will take place in October, 1907, the subjects being those for Honours in English (Language, Literature, and British History).

Fellow—John R. Cameron, 1904.

M'CUNN MEDICAL RESEARCH SCHOLARSHIPS.—These Scholarships were instituted in 1904 by the Trustees of Mr. William M'Cunn, of Landour, Largs, who died on 29th July, 1896. They are four in number, each of the annual value of £100, and tenable for one year, subject to reappointment for another year in the discretion of the Trustees. They are open to Graduates in Medicine of a Scottish University, provided that not more than two years shall have elapsed since the candidate has taken his or her degree. The subjects are eight in number, divided into two groups, viz.: Group A.—Medicine, Surgery, Pathology, Bacteriology. Group B.—Therapeutics, Public Health, Physiology, Physiological Chemistry. In 1905 scholarships were to be awarded for the encouragement of original research in one or more of the four subjects in Group B; and in 1906 four or less if reappointments are made as above mentioned will be awarded in like manner in Group A. A candidate must be nominated by a Professor or Lecturer in a Scottish University, or by a Teacher in Scotland recognised for the purpose of Graduation in Medicine by a Scottish University. Nominations must be lodged with the Secretaries of the Trust on or before the first day of September, and candidates shall undergo a written examination to be held in Glasgow in the month of October. The scholars shall be appointed by the Trustees, and shall during the year of tenure prosecute research in one or more of the subjects for that year in such institutions, either at home or abroad, as may be approved by the Trustees. For further information and for nomination forms apply by letter to Messrs. M'Innes, Mackenzie, and Lochhead, the Secretaries of the Trustees, 7 Gilmour Street, Paisley.

Scholars—Robert C. Low, M.B., Ch.B., Edinburgh, 1904; Spencer Mort, M.B., Ch.B., Glasgow, 1904; Robert May, M.B., Ch.B., 1905.

MACKAY SMITH SCHOLARSHIPS.—One in Natural Philosophy, the other in Chemistry, each of the annual value of £48, and tenable for two years in the Universities of Edinburgh and Glasgow alternately. During sessions 1882-83 and 1883-84 they were held in the University of Edinburgh, and during sessions 1884-85 and 1885-86 in the University of Glasgow. The next examination will be held in this University at the close of session 1908-9. Candidates must have

already attended, or must be then attending the class of Natural Philosophy or Chemistry respectively. The Scholarship in Chemistry will be awarded on an examination held at the same time and of the same scope as the Final Science Examination in that subject for the Degree of B.Sc. in Pure Science, and the Scholarship in Natural Philosophy on an examination held at the same time and of the same scope as the examination in that subject for the degree of M.A. with Honours.

Scholars—Thomas D. Mackenzie, B.Sc. (Chemistry), 1905 ; Neil M'Arthur (Nat. Phil.), 1905.

MACKINNON SCHOLARSHIP.—By the will of the late Sir William Alexander Mackinnon, K.C.B., LL.D., Surgeon-General of Her Majesty's Army and Director-General of the Army Medical Staff, a sum of £2000, less legacy duty, was bequeathed to this University for the foundation of a Scholarship. The Scholarship is to be awarded to the person who shall in each year show the greatest proficiency in a competitive examination in (1) Geology, (2) Natural History (with Comparative Anatomy), and (3) Modern Foreign Languages, the examination in each subject to be held every third year. The subjects are to be taken in rotation, commencing in such order as the University authorities shall determine. In the event of the Scholarship not being awarded in any year, the amount of the Scholarship with any accumulations shall be added to the amount to form the Scholarship in the same subject on the recurrence of the examination therein.

The following are the regulations :

1. The rotation of subjects shall be as follows :—Modern Foreign Languages at the Autumn Degree Examination, 1903, Natural History (with Comparative Anatomy) in Autumn, 1904, and Geology in Autumn, 1905, and so on thereafter.

2. The examination in Modern Foreign Languages shall be the same, and shall be held at the same time as the examination for Degrees in Arts with Honours in Modern Languages.

3. The examinations in Natural History (with Comparative Anatomy) and in Geology shall be the same and held at the same time as the Final Science Examination in these subjects for the Degree of B.Sc.

4. The holder of the Scholarship in one year shall be eligible for reappointment the next year, provided he is found qualified on examination in the subject for that year ; provided also that no candidate shall hold the Scholarship more than once in any subject.

5. The order of merit shall be fixed by the examiners at each examination, but no appointment in the Science subjects shall be made unless the candidate highest on the list shall have obtained at least 65 per cent. of the attainable marks.

6. Should the Mackinnon Scholarship in Geology fall vacant at

the same time as the Baxter Demonstratorship, the two appointments may be held concurrently.

Subject to these regulations, an appointment falls to be made after the examinations in October, 1906, to the Scholarship in Modern Foreign Languages.

Scholar—¹ Andrew M'Millan, M.A., and ¹ Alexander M. Watters, M.A. equal, 1905 (Geology).

METCALFE FELLOWSHIP.—Founded by the late Miss Sarah Metcalfe, Glasgow. (See under Metcalfe Bursaries, p. 354.)

The following are the regulations of the Metcalfe Fellowship :—

1. There shall be a Fellowship on the Metcalfe Foundation of the annual value of £100, tenable for three years, to be competed for in October, 1872, and thereafter triennially (1908).

2. Candidates must be Masters of Arts with Honours in the Group of Mathematics and Natural Philosophy, of not more than three years' standing, provided always that students graduating at the supplementary graduation in November of any year shall for all purposes be held to have graduated at the ordinary graduation in the April immediately preceding.

3. The examination shall be the examination for the Degree of Master of Arts with Honours in the Group of Mathematics and Natural Philosophy.

4. The Fellowship shall be held subject to the condition of pursuing in the University of Glasgow a course of study in such of the following subjects—viz., Higher Mathematics, Astronomy, Civil Engineering, and Chemistry—as the Senate shall in each case prescribe.

5. The Metcalfe Fellowship shall not be held along with the Eglinton Fellowship, the Snell Scholarship, or the Breadalbane Scholarship; and the holder of the Eglinton Fellowship shall not be allowed to compete for the Metcalfe Fellowship; but in the event of a candidate being appointed to a vacancy to be filled for less than three years, and being still eligible, under the usual regulations as above, to compete for the said Fellowship on the occasion of the next regular vacancy, he shall be qualified to compete just as if he had not previously held the Fellowship, but in no case shall any student be permitted to hold the Fellowship for more than three years in all.

Fellow—George D. C. Stokes, 1905.

MINING SCHOLARSHIPS.—The Institution of Mining and Metallurgy, Salisbury House, London, offers Scholarships of £50 each to Graduates to assist them in taking a practical course in Mines or Works at home or abroad. For particulars apply to Mr. Charles Latham, the Lecturer on Mining at the University.

REID STEWART FELLOWSHIP.—Mr. James Reid Stewart, Ironmaster, Glasgow, who died on 8th August, 1896, directed his Trustees

¹ Vacant through lapse of time.

to pay a legacy of £2000, under deduction of legacy duty, to the Senate, the free income of which is to be applied in and towards a Fellowship to be called the Reid Stewart Fellowship.

The following are the regulations :—

1. Candidates must be Masters of Arts who have taken the Degree of M.A. with Honours in either the Group of History or the Group of Economic Science, or be students presenting themselves for the final examination for the M.A. Degree with Honours in either of these Groups. The Fellowship shall alternate between History and Economic Science, beginning with History and giving three years to each.

But no student shall be admitted to the examination after the expiry of more than three winter sessions from the time of his completing the course necessary for the Degree of M.A. with Honours in either of these Groups.

2. The papers set in the examination shall be the same as the papers set for Honours in these Groups at the October examinations for Degrees in Arts, and the Examiners shall be the Examiners for the Degree of M.A. with Honours in these Groups. The Fellowship will be awarded for excellence in one Group, but not in both.

3. The Fellowship shall be tenable for three years, subject to the condition that the holder give his time and attention to the prosecution of his studies with a view to one of the learned professions or to such professional or business avocation as may be approved of by the Senate.

4. In the event of a vacancy occurring otherwise than by lapse of time, it shall be in the power of the Senate to appoint, after competition under the same conditions as above, either for the unexpired period of the vacated Fellowship or for the full period of three years. If the Fellowship is offered for a period of less than three years, the conditions of competition and tenure shall be the same as those stated above, provided that no student shall be excluded from the competition who was eligible when the Fellowship was last offered for three years.

5. In the event of the Examiners reporting in any year that no candidate has done sufficiently well to deserve the Fellowship, no appointment shall be made on that occasion, but the Fellowship shall be offered for competition in the following year under the same conditions as in the case of a vacancy occurring otherwise than by lapse of time.

6. It shall not be competent for the holder of the Reid Stewart Fellowship to hold any other Bursary, Scholarship, or Fellowship in this University, without the special leave of the Senate. The next competition will take place in October, 1908, and the examination will be the examination for Honours in the Group of Economic Science.

Fellow—David B. Mungo, LL.B., 1905.

SANDFORD SCHOLARSHIP.—Founded in 1862 (by the investment of a sum of £520, raised by subscription), in memory of Sir Daniel K. Sandford, the eminent Professor of Greek in this University, who died in 1838. It is tenable for two years, and is awarded to the student who, on examination, gives proof of the greatest proficiency in the Greek language. Value about £20 per annum.

The examination of candidates for this Scholarship takes place every alternate year in the month of April (1908), and is open to all matriculated students (not Masters of Arts) who have attended the Public Greek Classes for not less than two sessions.

The subjects of examination are selected from the following authors:—Homer, 12 books; Herodotus, 4 books; Sophocles, 3 plays; Thucydides, 4 books; Æschylus, 3 plays; Demosthenes, one or more orations; Aristophanes, 3 plays; Xenophon's *Memorabilia*; Pindar; Plato, one or more dialogues.

Candidates are examined on not more than four of the above-mentioned authors (of which Homer is always one)—two in prose and two in verse; and the subjects for each examination are given out by the examiners at the end of the session previous to that in which the examination takes place. Candidates are also examined on Translations from Greek into English, with Criticisms, and Translations, in prose and verse, from English into Greek.

The subjects for April, 1908, will be:—Homer, *Iliad*, xiii.-xxiv.; Sophocles, *Electra*, *Philoctetes*, *Trachiniae*; Demosthenes, *Against Meidias*; Plato, *Phaedrus* and *Symposium*; Unseen Translation; Prose Composition and Iambic Verse if any Candidate offers it.

Scholar—Thomas N. M'Ilravey, 1906.

(SIR WALTER) SCOTT SCHOLARSHIP.—(See under head "Scott Bursaries," p. 364).—This Scholarship, in value £80 per annum, is open for competition to Masters of Arts in the University of Glasgow of not more than three years' standing, having graduated with Honours in Classics or in Mental Philosophy, or to students who, at the time of competition, are presenting themselves for the final examination in the said University for the M.A. Degree with Honours in Classics or in Mental Philosophy. The examination to be in Classics, Mental Philosophy, and English Literature, which may include History. The Scholarship is tenable for two years, and the holder is required to follow such a course of study in the University of Glasgow, or give such assistance in the teaching work of the University as the Senatus Academicus may determine. The Scott Scholarship is not to be held along with any other Scholarship, Fellowship, or Bursary of the University of Glasgow. "The subjects of examination for the said Scholarship shall be, with the addition after-mentioned, Classics, or Mental Philosophy, or both of these, the special subjects being those for the examination for

the M.A. Degree with Honours in the given department or departments for the year, and in addition to the examination above-mentioned the competitors for the said Scholarship shall undergo an examination in English Literature of a higher kind than that required for an ordinary pass." The Scholarship will be open to competition in October, 1906. The examination will be in Classics and in English Literature (not Language) from Chaucer downwards.

Scholar.—¹ Alexander P. Crichton, M.A., 1904.

SHAW PHILOSOPHICAL FELLOWSHIP.—This Fellowship was founded by subscription in 1867, in the University of Edinburgh, in memory of Sir J. Shaw, Bart., who was born at Mosshead, in the Parish of Riccarton, and County of Ayr, in 1764, was elected Lord Mayor of London in 1805, and M.P. for the same city in 1806, and after a long and distinguished career, died in London in 1843; and is open to the competition of the Graduates in Arts of any of the Scottish Universities. The Fellowship consists of the free proceeds of the sum of £4,100 mortified to the Senatus Academicus of the University of Edinburgh under the following conditions, namely:—

1. The said Fellowship shall bear the name of "THE SHAW PHILOSOPHICAL FELLOWSHIP," in memory of the said Sir James Shaw, Baronet.

2. The Patronage of the said Shaw Philosophical Fellowship shall belong to the said Senatus Academicus, and shall be exercised by them, subject to the conditions herein contained, for the encouragement of the study of Logic, Metaphysics, Psychology, Moral Philosophy, and the History of Philosophy.

3. The Fellowship shall be awarded by competitive examination in the subjects of Logic, Metaphysics, Psychology, Moral Philosophy, and the History of Philosophy.

4. The Fellowship shall, on each occasion of an appointment thereto, be open to the competition of Graduates in Arts of the Scottish Universities—that is to say, the University of Edinburgh, the University of Glasgow, the University of Aberdeen, and the University of St. Andrews, of not more than five years' standing at the time of the competition, and of all students of the said Scottish Universities who, although they have not graduated in Arts, shall yet have successfully passed the last of the examinations necessary for such graduation in Arts, within the period of five years before the time of the competition; and the said Senatus of the University of Edinburgh, with consent of the Senates of the other Scottish Universities aforesaid, or of a majority of them, and with the concurrence of the University Court of the University of Edinburgh, shall have power either to increase or to reduce the number of years of standing as graduates, or as students who have passed all

¹ Vacant through lapse of time.

the examinations necessary for graduation, as above fixed, for competitors for the Fellowship.

5. The Fellowship shall be tenable for five years only, but the said *Senatus Academicus* of the University of Edinburgh shall have power, with consent of the *Senates* of the other Scottish Universities aforesaid, or of a majority of them, and with the concurrence of the University Court of the said University of Edinburgh, to extend, with reference to all holders of the Fellowship, the term of tenure to any period of years not exceeding ten, if, in the course of time, it shall appear to them desirable to do so, from an increase in the number of foundations of a similar kind in the University of Edinburgh, or in the other Scottish Universities, or other sufficient reason.

6. The competitive examination for the said Fellowship shall, except in the case below provided for, be conducted by two Examiners, to be appointed in the manner following—to wit, one of the Examiners shall be appointed by the *Senatus Academicus* of the University of Edinburgh, either from among the members of the said *Senatus* or others, as they may think proper, and the other Examiner shall be appointed by the *Senatus Academicus* of one of the other Scottish Universities in rotation.

7. The said Examiners, so appointed, shall report their opinion of the result of the examination to the *Senatus Academicus* of the University of Edinburgh, who shall, as patrons of the said Fellowship, appoint thereto the candidate who appears by the report to be best qualified by proficiency in the subjects of Logic, Metaphysics, Psychology, Moral Philosophy, and the History of Philosophy, provided that, as required by the clause next following, such best qualified candidate shall, in the opinion of both the Examiners, have manifested a sufficiently high degree of proficiency to merit the Fellowship.

9. Each holder of the said Fellowship shall, during his tenure thereof, be entitled to receive the annual proceeds of Four Thousand One Hundred Pounds, and of any addition of the said sum which may hereafter be made thereto, as after-mentioned, after deducting all reasonable expenses, including the payment of remuneration to the Examiners appointed as aforesaid.

12. It shall not be competent for any person to hold the said Fellowship along with any other Fellowship, Scholarship, or Bursary, in any Scottish University, or appropriated to the students of any Scottish University or Universities.

17. It shall be in the power of the *Senatus Academicus* of the University of Edinburgh to require the holder of the Shaw Philosophical Fellowship during the fourth or fifth year of his tenure of it, to deliver in the University of Edinburgh a Course of Lectures, not exceeding four, on any of the subjects for the encouragement of the study of which the Fellowship has been founded; and notice

shall be given to the holder of the Fellowship twelve months previously to the time fixed for the delivery of the said Lectures that he is required to deliver them ; but the said Senatus, with consent of the University Court of the University of Edinburgh, shall have power to alter the number of Lectures, if it shall be found desirable to do so.

Present Fellow—Alexander D. Lindsay, M.A. (of Glasgow University), 1904.

SNELL EXHIBITIONS.—In the year 1677, Mr. John Snell of Uffeton, in the County of Warwick, a native of Scotland, and formerly student in this University, devised to trustees a considerable estate near Leamington, in Warwickshire, for educating Scottish students at Oxford.

The Exhibitioners are now elected under a scheme settled in the Court of Chancery in 1872. Under the provisions of this scheme it was then arranged that the number of Exhibitions should be limited to fourteen, it being lawful to elect three in each year, unless the number on the Foundation should thereby be increased beyond fourteen, in which case not more than two were to be elected, the Exhibition being tenable for five years ; but by an agreement of date 2nd April, 1878, under provisions of the same scheme, the following regulations were sanctioned :—

1. The stipend of each Exhibitioner admitted to the foundation after the 31st day of December, 1878, shall be £132.

2. Until the 31st day of December, 1880, the greatest number of Exhibitioners shall be twelve.

3. During the year from the 31st day of December, 1880, to the 31st day of December, 1881, the greatest number of Exhibitioners shall be eleven.

After the 31st day of December, 1881, the greatest number of Exhibitioners shall be ten.

The number of ordinary Exhibitioners it shall be lawful to elect in each year shall be three, unless the number on the foundation for the time being would be thereby increased beyond the greatest number for the time being permitted by this agreement, in which case not more than two shall be elected.

By a subsequent agreement of date 21st January, 1886, the following modifications were made :—

1. The value of the Snell Exhibitions shall be reduced to £80 a year.

2. They shall be held, as heretofore, for five years, but the whole sum of £400 will be paid to each Exhibitioner during the first three years of his tenure in equal annual sums, but a moiety of the last annual payment shall be kept back, if the authorities of Balliol College think fit, until the Exhibitioner shall have taken his Degree.

Candidates must have been born in Scotland, or must be sons of fathers born in Scotland, and must "have resided¹ as Undergraduate Students for two years at least in Glasgow College, or for one year in that College and two at least in some other College in Scotland." "No candidate shall be admitted to examination who shall be a member of the University of Oxford of more than one year's standing from the day of his matriculation inclusive; and no candidate shall be admitted to examination more than once after he shall have completed his 23rd year; but a candidate otherwise qualified shall not be excluded from examination on the ground that he is a graduate of any Scotch University."

Candidates are expected to inscribe their names in a book kept at the Clerk of Senate's Office for the purpose, not later than 1st December, 1906. The next examination will be held in April, 1907, on the same days and at the same hours as the Examinations for the Degree of M.A. with Honours, the English paper being taken on Saturday, 6th April, at 9 A.M.

The subjects of examination are as follows :

IN LATIN, GREEK, LOGIC, MORAL PHILOSOPHY, AND HISTORY.—The subjects of examination for the Degree of M.A. with Honours.

IN NATURAL PHILOSOPHY AND MATHEMATICS.—The subjects of examination for the Ordinary Degree of M.A., and higher subjects which any candidate may express a wish to be examined in.

Candidates are requested to take notice that they are not required to attend the examination in more than one of the four groups, viz.: Classics, Mental Philosophy, Mathematics and Natural Philosophy, and History; that a candidate may be appointed for decided excellence in any one department alone; and if such excellence in some one of the departments be not displayed by three of the candidates, the Senate will either appoint a candidate who has shown sufficient proficiency in several departments, or will abstain from making three appointments. All candidates, however, will be required to write an English Essay on a subject prescribed at the time. Candidates who do not offer Classics will be required to show such a knowledge of Latin and Greek as to prove their ability to pass Responsions at Oxford.

Exhibitioners—Matthew Stewart, 1902; Charles G. Nelson, 1903; William J. Auld, 1904; John R. Brown, 1905; John H. Maxwell, 1906.

THOMSON EXPERIMENTAL SCHOLARSHIPS.—Three Scholarships, in value about £20 each, for the promotion of Experimental Research, founded by Sir William Thomson (now Lord Kelvin), LL.D., D.C.L.,

¹ By Resolution of date December 13th, 1866, the Senate determined that "Residence" shall, for the purpose of the Snell Trust, be constituted by regular attendance as a public student for the complete winter session on not less than two of the classes in the curriculum for the Degree of Arts.

Professor of Natural Philosophy in the University, by letter to the Principal of date September 6th, 1869, in which, after referring to "the liberal and friendly spirit which had been shown him by his colleagues in respect to his connection with telegraphic enterprise," and the "facilities for experimenting which the College had afforded him," he states that "he wished to mark his sense of these benefits by setting aside something of what he had received to assist in promoting the cultivation of experimental investigation in Glasgow University," and for this purpose offered for the acceptance of the Senate the sum of £1,000.

The scholars are appointed by the Senate on the recommendation of the Professor of Natural Philosophy from among students who have previously shown their zeal and ability in Experimental Investigations in the Physical Laboratory, and they are required to engage in the continual prosecution of Experimental Investigations in the Laboratory for not less than nine months of the year, to the satisfaction of the Professor of Natural Philosophy. These Scholarships may be held along with any other Bursary, Scholarship, or Fellowship.

Scholars for 1906-7—Alexander Macdonald, 1906; Alfred I. Steven, 1906.

JAMES WATT SCHOLARSHIP.—In 1808, James Watt, LL.D., presented the College with a perpetual annuity of £10, for the institution of a prize, to be awarded to the author of the best Essay on some subject in the following branches of study, to be taken in rotation:—
1. Any branch of Mechanics or its dependent Arts. 2. Statics, and the Machines and Arts dependent. 3. Pneumatics, Statical or Chemical, Machines and Arts. 4. Hydraulics, Hydrostatics, their Machines and Arts. 5. Chemistry, its Arts and Apparatus. All actual students who had completed, or who, at the end of the session in which the Prize fell to be awarded, should have completed a regular course of study in Languages and Philosophy, might be competitors. By Ordinance No. 93 of the Universities Commission (1889), issued on 15th February, 1895, and approved by Her Majesty in Council on 13th August, 1895, it was provided that the Watt Prize should be discontinued, that the funds should be allowed to accumulate for four years from the date of the Ordinance, and that thereafter a James Watt Scholarship in Engineering should be established.

The Scholarship is awarded by the Senate, on a special report by the Faculty of Science, to a Bachelor of Science of distinction of not more than two years' standing. It is tenable for two years, and the James Watt Scholar is required to pursue during his tenure special higher studies in the Engineering Laboratory, under the direction and to the satisfaction of the Professor.

3.—PRIZES.

Besides the class Prizes, and a number of Prizes given by the different Professors for particular kinds of merit, there are others which the generosity of public-spirited individuals has founded for the encouragement of learning in the University.

The names of the Prizemen for Session 1905-1906 will be found in the Degree and Prize List.

INDEX.

FOUNDATION.	NATURE OF PRIZE.	AWARDED FOR
Arnott, - - - - -	£25 and £15,	Examinations.
Brunton Memorial, -	£10,	Do.
Buchanan (3), - - -	Books,	Do.
Burnet, Lindsay, - -	Silver Medal.	Research.
Cleland, - - - - -	Gold Medal,	Examinations.
Cleland & Rae Wilson,	Four Gold Medals,	Do.
Cobden, - - - - -	£20 and Silver Medal (triennial),	Essay.
Coulter, - - - - -	Two at £5 each,	Essays.
Cowan, - - - - -	Three Gold Medals,	Examinations.
Cunninghame, - - -	Gold Medal,	Do.
Dickson Prize, - - -	Books,	Do.
Dobbie-Smith, - - -	Gold Medal (biennial),	Essay.
Dowanhill, - - - - -	£20 and £10,	Elocution.
Ewing, - - - - -	Gold Medal (biennial),	Essay.
Findlater, - - - - -	£38,	Examination.
Gartmore, - - - - -	Gold Medal (biennial),	Essay.
Gladstone Historical,	£21 (biennial),	Examination.
Gladstone Memorial, -	£5 in Books,	Do.
Harvey, George, - - -	£14,	Do.
Henderson, - - - - -	£21,	Essay.
Jamieson, - - - - -	£10,	Examination.
Jeffrey, - - - - -	Gold Medal,	Do.
Kirk Memorial, - - -	£14,	Do.
Logan, Thos., Memorial,	Gold Medal and £12,	Do.
Luke Historical, - - -	£9 (biennial),	Do.
Macfarlan and Cook, -	£21,	Do.
Macleod, - - - - -	Gold Medal,	Do.
Muirhead, - - - - -	Books,	Do.
Muirhead, G. Roger, -	£2 5s.,	Do.
Nichol Memorial, - - -	Books,	Do.
Reid, John, - - - - -	£25,	Original Research.
Ross, Robert (2), - - -	Med., books, or money,	Examinations.
Scott-Macfarlan, - - -	Gold Medal,	Examination.
University, - - - - -	Silver Medal,	Essay.
Walker (4), - - - - -	Books, etc.,	Examinations.
Watson, - - - - -	£50,	Examination.

ARNOTT PRIZES.—Founded in 1869, by Dr. Neil Arnott of London, who presented to the Senate the sum of £1,000 to found a Prize, or Prizes, for the encouragement of the study of Natural Philosophy among the Medical students of the University.

By resolution of the Senate of date April 10, 1873, the following regulations were adopted :—

1. That there shall be two separate examinations—one in General Physics, for students of the first and second years of their Medical studies; the other for students of the third and fourth years, in Physiological Physics, or the application of the doctrine of General Physics to Physiological Science.

2. The knowledge required for the second of these examinations being much more extensive, and of a much higher order than that required for the first, and being the kind of knowledge of which it is most important to encourage the cultivation, as not only useful in the practice of the Medical Art, but eminently fitted to advance the Physiological Sciences; that a sum of not less than Twenty-five pounds be offered annually, in one or several sums, as circumstances may require, to the student or students who excel in the second examination.

3. That the remaining portion of the revenue derived annually from Dr. Arnott's donation be offered in the same way to the student or students who excel in the first examination.

4. That the first examination be under the superintendence of the Faculty of Arts, with the Professors of Physiology and of Anatomy as Assessors.

5. That the second examination shall be under the superintendence of the Medical Faculty, with the Professors of Natural Philosophy and of Mathematics as Assessors.

6. That all candidates shall, at the commencement of each session, intimate their intention to the Assistant Clerk (Matriculation Office); and that, to prevent unqualified persons from coming forward, each candidate shall produce satisfactory evidence of his having attended a Course of Lectures on Natural Philosophy, or of having been a pupil in a Laboratory where Practical Physics or Practical Physiology is taught; or, failing of these qualifications, he shall deposit the sum of ten shillings, which shall be forfeited if his examination marks fall below the average standard.

7. That every candidate who passes creditably the first examination shall be thereby entitled to come forward for the second, without being obliged to deposit the sum of ten shillings.

8. That no prize shall be awarded without sufficient merit being shown, and that in the event of one or more of the prizes on any occasion not being awarded, the amount shall be added to the principal sum.

The examination will be in writing, and will be held on Friday, the 5th October, 1906, in the Examination Hall, at 2 P.M. Intending candidates to give in their names to the Assistant Clerk (Matriculation Office) on or before 19th September.

BRUNTON MEMORIAL PRIZE.—Founded in 1879, in memory of the late Duncan M. Brunton, M.A., M.B., Paisley, a distinguished graduate of this University, who died on 16th November, 1876, of fever, contracted in the diligent discharge of his professional duties in the Royal Infirmary of Paisley. The Committee of Subscribers paid over to the Senate the sum of £300, the interest of which is to be given annually to the most distinguished graduate in Medicine of the year.

BUCHANAN PRIZES.—A Bursary was founded in 1866, in recognition of the eminent services of Robert Buchanan, LL.D., as Professor of Logic and Rhetoric in the University during the long period of forty years. The fund consists of a sum of £314 raised by subscription. The Buchanan Bursaries having been founded under the Will of Professor Buchanan, the proceeds of this fund are now, with the sanction of the subscribers, applied to the purchase of books, which are annually awarded to the most distinguished students in the classes of Logic, Moral Philosophy, and English Literature.

LINDSAY BURNET SILVER MEDAL.—In 1901 the relatives of Mr. Lindsay Burnet, Engineer in Glasgow, who died on 14th March, 1895, founded this Medal to his memory, and also as a memorial of the respect which he entertained for Archibald Barr, D.Sc., Professor of Civil Engineering and Mechanics, and for his work in the University. The following are the regulations:—

The Medal shall be awarded to a student in regular attendance at the University for a thesis descriptive of a research upon a subject connected with The Properties or the Utilisation of Fuel, The Generation or Properties of Steam, The Principles of Thermodynamics, or The Operation of Heat Engines.

The research shall be conducted by the candidate in the Engineering Laboratories of the University, but in exceptional cases investigations requiring the use of machines or apparatus not provided in the Laboratory may be conducted in part elsewhere under such conditions as may in each case be sanctioned by the Professor of Engineering.

The Professor of Engineering may sanction the employment of such assistance, if any, as he may in each case deem necessary for the efficient carrying out of the research, and shall regulate the use of apparatus belonging to the University as regards the time when it shall be at the disposal of the candidate and the manner in which it may be employed.

The Senate shall from time to time issue regulations regarding the standing of students who shall be eligible to compete for the Medal, the form which the theses shall take, the date on or before which the theses must be submitted, and other details.

All matriculated Engineering Students and all University or other Research Students may compete; any Thesis submitted

must be a description of an experimental research conducted in accordance with the foregoing regulations, and must be sent to the Clerk of Senate not later than 12th October.

The Medal shall be awarded by the Senate after receiving a report from the Professor of Engineering and any assessor or assessors whom the Senate may have appointed to act with him.

The Senate may withhold the Medal in any year in which, in their opinion, no thesis of sufficient merit has been submitted.

The Professor of Engineering shall have the power to prescribe a particular subject or to limit the range of subjects upon which theses may be presented in any year; and, farther, with a view to avoiding any undue interference with other researches, or with the general routine work of the Laboratory, he shall have power to prescribe the particular subject or range of subjects with which any individual candidate may deal.

The theses shall become the property of the University, and may be preserved in the Engineering Departmental Library or elsewhere as the Senate may direct, and the Senate may grant to students or others access to the theses under such conditions as they may from time to time prescribe. At all reasonable times the candidate shall have access to his own thesis for reference.

All results obtained in researches conducted in competition shall be subject, as regards rights of publication, to the general conditions applicable to work done in the University by research students and to any special regulations that may be made relating to work conducted in the Engineering Laboratory.

Should any new Chair or Chairs in Engineering Science be instituted in the University, the Professor whose laboratory courses are, in the opinion of the Senate, most closely identified with the general application of thermodynamics to engineering practice shall be deemed to be the Professor of Engineering for the purposes of this foundation.

CLELAND AND RAE WILSON GOLD MEDALS.—Dr. James Cleland, Superintendent of Public Works in Glasgow, who died 14th October, 1840, founded a Gold Medal of the value of Ten Guineas, to be bestowed in alternate years on a student of Divinity, and a student of Natural Philosophy, as a prize for the best Essay on any subject to be prescribed by the Principal and Professors of the University.

Dr. William Rae Wilson of Kelvinbank, who died 2nd June, 1849, founded a Gold Medal to be bestowed upon the Divinity student who should produce the best Essay on the Life of Christ.

These foundations are now regulated by Ordinance No. 97 of the Universities Commission (1889). The Cleland Gold Medal, not exceeding ten guineas in value, is awarded to the most distinguished student in the class of Natural Philosophy in each year. The remainder of the free income of the Cleland Foundation is added to

the total free income of the Rae Wilson Foundation, to provide four Gold Medals of equal value. These medals are awarded in each year as follows:—One to the most distinguished student in each of the classes of (1) Divinity, (2) Ecclesiastical History, (3) Hebrew and Semitic Languages, and (4) Divinity and Biblical Criticism. In the event of there being no student of sufficient distinction in any of these classes, the proportion of the income for that year may be applied towards the promotion of theological study in such manner as the Senate may decide.

COBDEN PRIZE.—This prize of the value of £20, together with a silver medal, will be offered by the Cobden Club, London, every third year for an essay on some subject connected with political economy. The subject is to be fixed by the three adjudicators, two of whom are appointed by the University and the third by the donors. Members of the University of not more than six years' standing may be competitors. The prize will be awarded in 1906 and thereafter triennially.

COULTER PRIZES.—In 1787 Mr. James Coulter, merchant in Glasgow, bequeathed £200 to the University, "the annual proceeds to be applied in premiums, one or more, either pecuniary or honorary, for the encouragement of Composition and Elocution, upon subjects of the Faculty's choosing." The interest of this sum is now divided into Two Prizes of £5 each; the one to be given in alternate years for a Sermon or Theological Essay, and for an Essay on Mental Philosophy and English Literature, the other to be given annually for a translation from some Classical Author, or other composition connected with Classical Literature. The competition for these prizes is open to all matriculated students of the University.

COWAN GOLD MEDALS.—In 1836 Dr. Cowan of Sunderland presented to the University the sum of £400, the interest to be applied annually in the purchase of Two Gold Medals of the value of about £10 each, to be awarded to the two students who may distinguish themselves most in the Greek and Latin Examination upon the Blackstone; and shortly afterwards (1839) the same gentleman presented the University with an additional sum of £105, the interest to be expended annually in the purchase of a Gold Medal of the value of £5, to be awarded to the best student in the Humanity Class.

The examination for Dr. Cowan's Blackstone Medals will be held early in November, 1906. Competitors to be eligible must be public students in some curriculum class in the Faculty of Arts.

For the Greek Medal—1. A candidate must have received a Certificate in the Greek Class for session 1905-1906.

2. Every candidate will be required to answer a Preliminary Paper, consisting of unprepared passages for translation.

3. Two or more candidates, selected by this paper, will on a subsequent day be examined orally in the books which they offer.

4. Each selected candidate must offer for the Oral Examination (i.) one Verse Subject, (ii.) one Prose Subject. (i.) The Verse Subject must be *either* five books of Homer, *or* two Greek plays (tragedies or comedies). (ii.) The Prose Subject may be any *one* of the following :—(a) Herodotus—two books ; (b) Thucydides—two books ; (c) Plato—two dialogues, or two books of the *Republic* ; (d) Aristotle—two books of the *Ethics*, of the *Politics*, or of the *Rhetoric*.

5. Any member of the Greek Class for session 1906-7 is at liberty to go in for the Preliminary Paper, even though he is not a candidate for the Cowan Medal ; and if he acquits himself with distinction in that paper, his name will be mentioned when the award of the Medal is announced.

For the Latin Medal competitors must in the session preceding the competition have received a public ticket of the Latin Class.

Notice is hereby given, that at the examination for Dr. Cowan's Medals in November, 1892, and thereafter, no one will be admitted to compete for the Greek Cowan Medal who has attended for more than three sessions, or who, after passing the preliminary examination in Greek, has attended for more than two sessions in any Scottish University, and no one shall be admitted to compete for the Latin Cowan Medal who has attended for more than two sessions, or who, having been admitted to the Senior Class in consequence of having passed the preliminary examination in Latin, has attended for more than one session in any Scottish University.

CUNNINGHAME GOLD MEDAL.—In 1886 Mr. Andrew Cunningham, Town Clerk Depute of Glasgow, bequeathed to the University, *inter alia*, £350, free of legacy duty, with directions that the annual revenue thereof should be applied in purchasing a Gold Medal as a prize in the class of Mathematics.

DICKSON PRIZE.—In 1895, when the late Professor Dickson retired from the Chair of Divinity, his former students presented him with a testimonial consisting of silver plate and a cheque for £120. This sum was handed over by Dr. Dickson to the University Court, that the free annual income might be applied in the form of a prize of serviceable books to accompany the gold medal given to the most distinguished student of the year in the class of Divinity. In accordance with the wish of the subscribers the prize has been called the Dickson Prize.

DOBBIE-SMITH GOLD MEDAL.—In 1881 Mr. Thomas Smith, L.R.C.S.E., Heriot Hill House, Edinburgh, presented to the University, in memory of his wife, lately deceased, the sum of £150 for the purpose of founding a University Gold Medal of about £10 in value.

to be given biennially for the encouragement of the study of Botany. The competition is open to all Matriculated Students of the session in which the Medal is to be awarded; the subject of competition—which shall always be a Botanical subject—to be selected by the Professors of Botany and Natural History, and announced at least eighteen months before the date fixed for receiving essays. (See page 426.)

DOWANHILL PRIZES.—Two prizes, one of £20, and the other of £10, for “Excellence in the Art of Oratory and Declamation, and in the practice of a refined and pleasing Delivery, and in reading the Scriptures,” founded in 1865 by Mr. John Buchanan, merchant in Glasgow, as sole Trustee, nominated and appointed by his deceased brother, Mr. Thomas Buchanan, also merchant in Glasgow, and in order to carry out the intentions of his said brother. These prizes are awarded annually to Students of Divinity, at the termination of the third or fourth session of their attendance on the Hall, by the votes of their fellow-students. Competitors must have attended for two sessions an Elocution Class, taught by a master approved by the Senate.¹

The above foundation is in memory of the late Mr. James Buchanan of Dowanhill, of Ellison MacCallum, his wife, and of Mr. George Buchanan of Stanley, Perthshire, the Father, Mother, and elder Brother of the Founder.

EWING GOLD MEDAL.—In 1828 James Ewing, LL.D., of Levenside, presented the University with £100 for a Gold Medal to be given every second year for the best essay on an historical subject. The Gartmore and Ewing Medals are to be given alternately.

FINDLATER (DIVINITY) SCHOLARSHIP OR PRIZE.—This Scholarship, consisting of the free annual proceeds of the sum of £1,000 gifted to the Senate by Mr. Alexander Findlater, Dublin, was founded in 1871. The following regulations have been adopted by the Senate:—

1. The Findlater Scholarship shall be awarded annually by competition.

2. The subjects of examination shall be the same as those prescribed for the Degree of B.D., and the examinations shall be held at the same times as the examinations for the Degree of B.D.

3. The competition shall be open to all students of Divinity in this University who shall complete the ordinary course at the close of the session in which the examinations are held.

The next competition will take place in October, 1906, and March, 1907. Names of Candidates to be given in to the Assistant Clerk (Matriculation Office) on or before 17th October, 1906.

¹ See note under Faculty of Theology, *supra*.

GARTMORE GOLD MEDAL.—In 1788 Mr. Robert Graham of Gartmore presented the University with £100 for the institution of a Prize for the best essay on any subject intimately connected with the nature, foundation, advantages, and support of political liberty. This Prize—a Gold Medal—is open to the competition of all students of the University, and is given biennially. The founder directed that the surpluses should be accumulated till a capital was formed sufficient to found a Bursary.—See Gartmore Bursary, p. 327.

GLADSTONE HISTORICAL PRIZE.—Founded in 1880 by the Gladstone Club, in commemoration of the election in 1877 of the Right Honourable William Ewart Gladstone, M.P., as Lord Rector of Glasgow University, and in recognition of his distinguished career as a scholar, author, statesman, and orator. The following are the regulations :—

1. The prize shall be given for the best examination in English History.
2. The examination shall be held biennially.
3. The value of the Prize shall be Twenty Guineas.
4. The competition shall be open to Graduates of Glasgow University of not more than two years' standing from the date of their first graduation. The next competition will take place in January, 1908. Names of competitors to be given in to the Assistant Clerk (Matriculation Office) not later than 1st December, 1907.

GLADSTONE MEMORIAL PRIZE.—In November, 1899, the Committee of the Gladstone Memorial Fund resolved to devote the revenue accruing from the surplus of the Fund to the establishment of Gladstone Memorial Prizes to be given in Books at the Universities of Oxford, Cambridge, and London, at the Scottish Universities, and the University Colleges in Great Britain, for special proficiency in History, Political Science, and Economics. In this University the prize, in value Five Pounds, will be awarded annually. Either graduates of this University who have taken the degree of M.A. with Honours, or students presenting themselves for examination for the Degree of M.A. with Honours in Economic Science, may be candidates ; but no student shall be eligible after the expiration of more than six winter sessions from the time of his or her first entering a class qualifying for the Degree of M.A., and no student who has once obtained the prize may compete a second time. The subjects of examination shall be the same as those prescribed for Honours in Economic Science, and the examination shall be held at the same time as the autumn examination for Degrees with Honours in Economic Science. The Prize is awarded by the Senate on the report of the Examiners for Degrees, and it is competent for the Senate to award it to the holder of a Fellowship, or Scholarship, or Bursary. The Prize will be open to competition in October, 1906.

GEORGE HARVEY PRIZE.—Founded in 1874, by the liberality of a donor who has withheld his name, in memory of the late Mr. George Harvey of No. 9 Park Quadrant, Glasgow. Present annual value £14, which is given as a prize in the class of Civil Engineering, to the student who shows, during the session, the greatest proficiency in the department of applied Mechanics and Shipbuilding. Any accumulation of surplus income to be given as a second prize of £5 or £10 in the same department.

HENDERSON PRIZE.—In 1850 Mr. John Henderson of Park, merchant in Glasgow, instituted an annual prize of the value of £21 sterling, to be called the "Henderson Prize," for the best Essay on some subject relating to the Divine Authority and Practical Value and Influence of the Sabbath. The Universities Commission (1889), by Ordinance No. 101, altered the conditions and directions affecting this prize. It is now to be awarded for the best essay on a subject to be fixed by the Faculty of Divinity, provided always that in every third year at least, the subject shall relate to the Divine authority and practical value and influence of the Sabbath. The competition is to be open to Masters of Arts of not more than five years' standing, as well as to matriculated students of the University.

JAMIESON PRIZE.—In 1854 a subscription list was opened for the foundation of a prize or scholarship in Divinity, but the commercial difficulties of the following years prevented the purpose of the promoters being carried out at the time. In 1881 the sum subscribed, amounting, with accumulated interest, to £319 6s. 4d., was handed over to the University, and the Senate resolved to connect it with the name of the Convener of the Committee of subscribers, the Rev. Robert Jamieson, D.D., formerly minister of St. Paul's Church, Glasgow.

The following regulations have been adopted by the Senate :—

1. The Jamieson Prize shall be awarded annually by competition.
2. The subjects of examination shall be the same as those prescribed for the Degree of B.D., and the examinations shall be held at the same times as the examinations for the Degree of B.D.
3. The competition shall be open to all students of Divinity in this University who shall complete the ordinary course at the close of the session in which the examinations are held.
4. The Prize shall not be awarded to any one who has gained a Scholarship or Fellowship in Divinity.

The next competition will take place in October, 1906, and March, 1907. Names of candidates to be given in to the Assistant Clerk (Matriculation Office) on or before 17th October, 1906.

JEFFREY GOLD MEDAL.—Mr. Francis Jeffrey, advocate (afterwards Lord Jeffrey), on his re-election as Lord Rector of this Uni-

versity, in 1821, gave a prize of a Gold Medal and continued to do so annually.

In 1849 Lord Jeffrey presented the University with the sum of £120 for a Gold Medal to be awarded each session to the most distinguished student of the Greek Class.

KIRK MEMORIAL PRIZE.—A sum of £402 was collected in 1893 by various friends of the late Alexander Carnegie Kirk, LL.D., formerly President of the Institution of Engineers and Shipbuilders in Scotland, for the purpose of founding a prize in his name, in connection with the Naval Architecture Class in the University. The free annual income of the foundation is awarded annually as a prize. The competition is open to students who have, in the session of competition, attended the Senior Class of Naval Architecture, and who are completing the Final Science Examination under Ordinance No. 23, Glasgow No. 2, embracing (a) Naval Architecture with Marine Engineering, and (b) Practical Work in Ship and Marine Engineering Drawing, the award being determined by the proficiency shown in (a) and (b). Should two or more candidates be reported equal, the Senate may divide the Prize, or prescribe a further examination. The subscribers have given the Senate power to convert this Prize into a Bursary, should it be found expedient or advantageous to do so at any future time.

THOMAS LOGAN MEMORIAL MEDAL AND PRIZE.—Mr. David Logan, fruiterer, Glasgow, who died on 19th May, 1886, directed his trustees to pay to the Senate the sum of £500, free of legacy duty, to found a Gold Medal and Prize in memory of his brother, Thomas Logan. The Medal is of the value of £5, and the Prize consists of the balance of the annual proceeds given in money. They are awarded annually in April to the graduate in Arts of the preceding year who obtained the highest marks in the Degree Examinations.

LUKE HISTORICAL PRIZE.—A sum of £150 was collected in 1863 by various friends of the late Mr. George Rankin Luke, in Oxford and Scotland, for the purpose of founding a prize in his name, in connection with the University of Glasgow, where he studied during two years of his brilliant career as a scholar.

The Senate, with the sanction of the promoters of this fund, resolved to employ it to found a biennial Prize, for excelling in a competitive examination on general subjects connected with Ancient History and Literature. The examination to be conducted either altogether in writing, or by combination of writing and *vivâ voce* questions; and the determination to rest with the Professors of Humanity and Greek, in conjunction, in case of uncertainty, with any one of their colleagues whom they may desire to nominate.

The Prize on the above foundation is given to the student who

acquits himself best in an examination in Ancient Greek and Roman History.

The next competition will be held in January, 1907. In addition to historical questions, original passages will be given for translation from the standard authors. The competition is open to all students who shall have attended during session 1905-6 any Greek or Latin Class.

Names of Candidates to be given in to the Assistant Clerk (Matriculation Office) on 1st December, 1906.

MACFARLAN AND COOK TESTIMONIAL PRIZE.—The Macfarlan and Cook Testimonial Prize of Twenty Guineas, instituted in 1847 (along with a similar Prize in the University of St. Andrews), by the friends of the late Principal Macfarlan, D.D. of this University, and Professor George Cook, D.D. of St. Andrews, as a memorial of the services rendered to the Church of Scotland by these eminent clergymen, is bestowed annually on the Theological Student, of three years' standing, who shall pass the best examination in Greek, Moral Philosophy, Hebrew, Ecclesiastical History, and Divinity.

MACLEOD MEDAL.—In 1895 Lady Macleod instituted this Gold Medal in memory of her husband, Sir George Husband Baird Macleod, M.D., LL.D., Regius Professor of Surgery in this University from 1869 to 1892. The competition is open only to those who have attended the classes of Systematic and Operative Surgery taught by the Regius Professor of Surgery in the University, and women students are not eligible. The Medal is awarded yearly to the student who most distinguishes himself in the work (written, oral, and practical) of these classes.

MUIRHEAD PRIZES.—In 1776 Messrs. John Muirhead of Tegelshugh, and Peter Muirhead, minister of Dysart, brothers of the deceased Mr. George Muirhead, Professor of Humanity in Glasgow College, presented a donation of £100, the interest to be applied in purchase of books to be awarded as prizes to those students attending the Humanity Class who shall be thought most deserving.

GEORGE ROGER MUIRHEAD PRIZE.—In 1896 a sum of £100 was bequeathed to the University by Mrs. Elizabeth Lockhart Roger or Muirhead, Glasgow, to found a prize in the Chemistry class in memory of her son, George Roger Muirhead, who studied Chemistry in this University. The free annual income is paid annually to the medallist of the Chemistry class for the year.

NICHOL MEMORIAL PRIZE.—In 1895 the late Mrs. Jack presented the University with the sum of £150 for the purpose of founding a prize, to be called the "Nichol Memorial Prize," in memory of her brother, John Nichol, LL.D., Professor of English Language and Literature in this University from 1862 till 1889, who died in London on 11th October, 1894, and especially in commemoration of the active interest which he took in the teaching of English Litera-

ture to women in Glasgow and elsewhere. The free income of the fund is applied annually to providing a first prize for the English Literature Class in Queen Margaret College.

ORIENTAL SOCIETY'S ARABIC PRIZE. On 25th October, 1905, the Glasgow University Oriental Society resolved to give in books for the five academic years beginning 1st October, 1905, an annual prize of Three Guineas to the best student or students in Arabic.

RAE WILSON GOLD MEDAL.—(See Cleland and Rae Wilson, p. 402.)

JOHN REID PRIZE.—A Prize of the value of £25 was founded in 1882 by Miss Mary Reid, Renfrew Street, Glasgow, in memory of her brother, the late Mr. John Reid, surgeon, 150 Renfrew Street, Glasgow. The prize will be awarded for the best original research conducted in one of the Hospitals or Scientific Laboratories in Glasgow, bearing on any department of Medical Science. The competition is open to registered students of medicine of not less than two years' standing; and to qualified medical men of not more than two years' standing, who (1) are still attached as *bonâ fide* students to one of the Glasgow Medical Schools, who (2) are not engaged in practice, and who (3) undertake to give up the prize if they enter on practice while holding it. All candidates are required to produce evidence of having attended a regular course of instruction, in one of the medical schools of Glasgow, on *four* of the following subjects:—Medicine, Clinical Medicine, Surgery, Clinical Surgery, Materia Medica, Physiology, Pathology—such course of instruction having been received, in whole or in part, within three years of competing for the prize. The prize may be awarded for one, two, or three years, according to the value of the work done.

Further information may be obtained from Mr. John Hurl, jun., writer, 157 St. Vincent Street, Glasgow.

ROBERT ROSS PRIZE.—The late Robert Ross, Esq., writer, Glasgow, by his Will, dated 1880, bequeathed to the Dean and Council of the Faculty of Procurators, Glasgow, the sum of £500, to be held by them in trust, "to the end that the free annual income thereof shall be applied as an annual prize in the form of a medal, of books, or of money, as the Dean and Council may determine, to a student in each of the Scots Law Class and the Conveyancing Class of the University of Glasgow in equal proportions, such prize to be awarded for eminence displayed, either in the general business of the class or in any other manner in which the said Dean and Council may prescribe."

SCOTT-MACFARLAN GOLD MEDAL.—Founded in 1870 by Miss Scott, daughter of the late Rev. Robert Allan Scott, Vicar of Cranwell, Lincolnshire, in fulfilment of her father's intentions.

Mr. Scott, wishing to encourage the study of Greek in the University of Glasgow, of which he was an alumnus, and from which he obtained an Exhibition to Balliol College, Oxford, in 1825,

dedicated to that purpose the sum of £100 for a Gold Medal, to be called the "Scott-Macfarlan Prize for Greek," in memory of Mr. Scott's kinsman, the late Principal Macfarlan, and to be given on the last day of the session in each year to the best scholar in Greek of the session; the medal to be adjudged by the votes of the students of the upper Greek class. As the Jeffrey Medal has long been given to the best student in the senior Greek Class, the "Scott-Macfarlan" Medal is awarded to the best student attending the Honours Greek Class for the first time.

UNIVERSITY MEDAL.—The University bestows annually a Silver Medal for an Essay in Mental Philosophy.

WALKER PRIZES.—Four Prizes (consisting of Books or Instruments) to be competed for each year by students of Civil Engineering and Mechanics, founded in 1857 and 1861 by James Walker, Esq., Civil Engineer, LL.D., F.R.S.S.L. and E.

The competition is open to all persons who shall have duly entered themselves as attending the class of Civil Engineering and Mechanics during the current session.

The competitors are examined orally and in writing; and two of the prizes are awarded on the results of the written examinations; the other two by votes of the class.

WATSON HISTORICAL PRIZE.—This Prize was founded in January, 1905, by Mr. Robert William Seton-Watson, in memory of his father, William Livingstone Watson, of Ayton and Balmanno, who died on 19th May, 1903. The following are the conditions laid down by the donor, viz.:—

1. The Prize shall be called the Watson Historical Prize, and its object is to encourage the study of History and Foreign Languages.

2. The prize shall be offered from time to time in money, and shall never be of the value of less than £50. It shall be offered as soon after that sum is available out of the income of the investment as shall seem advisable to the Senate.

3. The prize shall be adjudged by the Examiners in the Honours Group of History.

4. The prize shall be awarded to the student who shall be adjudged to have passed highest in the examination in the Honours Group of History, provided that the candidate shall have reached the standard of a First Class in that examination.

5. Should the prize not be awarded in any year in which it is offered, the sum available shall be added to the capital sum.

6. The successful candidate shall be bound to spend not less than three months on the continent of Europe in studying a foreign language or in carrying out research in foreign archives—in either case to the satisfaction of the Professor of History; and he shall pledge himself to avoid, so far as is in his power, hotels, pensions, and other places where English is spoken.

7. The prize shall be paid in two instalments, viz., at first £35 when the successful candidate sets out for the Continent, and after the lapse of two months the balance—in each case on the certificate of the Professor of History.

8. The Donor reserves the right, under advice from the Professor of History or the University Court, to readjust the conditions attached, with a view to effect any improvements which may be suggested by experience.

*LIST OF BURSARIES, &c., OPEN TO COMPETITION
DURING SESSION 1906-7.*

A.—FACULTY OF ARTS.

1.—BURSARIES.

The following is a summary of the principal provisions of Ordinance No. 57¹ of the Universities Commission (1889) relating to the Bursary competition:—

The subjects of the examination for open Bursaries in Arts of the first year shall be the subjects prescribed for the Arts Preliminary, of which subjects candidates may select not more than five. Candidates who select Latin, Greek, or Mathematics, must take the papers of the higher standard in those subjects. In determining the marks to be assigned to the several subjects of examination, English, Latin, Greek, and Mathematics shall each have assigned to them double the marks assigned to any other subject, and no candidate shall be credited with marks in any subject in which he has not obtained such proportion of the total number of marks assigned to that subject as the Senate may from time to time prescribe.

Additional papers are set in

A. Latin, Greek, Mathematics.

B. French, German, Dynamics.

Of these additional papers candidates are allowed to take *either* two subjects from A., *or* one subject from A. and two from B., *or* three subjects from B.

No Candidate shall, except as hereinafter provided, obtain an open Bursary in Arts who shall not have passed the Preliminary Examination in Arts; provided that it shall be in the power of the Senate, with the approval of the University Court, to admit to an open Bursary in Arts a Candidate who shall have passed in at least three subjects of the Preliminary Examination, on the condition that he shall not retain the Bursary unless he shall have passed in

¹ The full text of this ordinance is printed at pp. 299-303.

all the subjects not later than the second Preliminary Examination after the date of his admission as Bursar. [This power lapsed in May, 1902.]

No student who has during a winter or summer session attended in any Scottish University any class qualifying in his case for graduation in Arts or Science, shall be eligible to compete for Bursaries of the first year in Arts or Science.

Candidates for Bursaries in Arts which are not awarded by open competition shall present themselves for the Preliminary Examination in Arts, and no Bursary shall, except as hereinafter provided, be awarded to any Candidate who shall not have passed the Preliminary Examination in Arts: provided that it shall be in the power of the Senate, with the approval of the University Court, to admit to a Bursary in Arts not awarded by open competition a Candidate who shall have passed in at least one subject of the Preliminary Examination, on the condition that he shall not retain the Bursary unless he shall have passed in all the subjects not later than the Second Preliminary Examination after the date of his admission as Bursar.

N.B.—For the Bursaries open to women students see pp. 303—306.

FOR STUDENTS ENTERING THE FIRST SESSION IN ARTS.

I. FOR SPECIAL DISTINCTION IN PARTICULAR SUBJECTS.¹

The Bursaries for special distinction are limited to Students of the first year who have passed the Arts Preliminary, and who have not gained a Bursary for general excellence.

1. *Forfar Bursary*, for special distinction in Classics (Latin and Greek), annual value £36, tenable for four years.

2. *Hastie Bursary*, for special distinction in English, annual value £26, tenable for four years.

3. *Black Bursary*, for special distinction in Mathematics, annual value £19, tenable for four years.

4. *John Clark (Mile-End) Bursary*, for special distinction in French, annual value £30, tenable for four years, for Protestant students, sons or daughters of Protestant parents.

5. *John Clark Mile-End Bursary*, for special distinction in German, annual value £30, tenable for four years, for Protestant students, sons or daughters of Protestant parents.

6. *General Council Bursary*, for special distinction in Dynamics, annual value £20, tenable for three years.

II. FOR GENERAL EXCELLENCE.

7. *Forfar Bursary*, annual value £36, tenable for four years—open.

¹ For Andrew and Bethia Stewart Bursaries, see page 366.

8. *Gartmore Bursary*, annual value £21, tenable for three years—open.

9. *Taylor Bursary*, annual value £7, tenable for four years—open.

10 and 11. *Two King William's Bursaries*, annual value £15 each, tenable for three years—open.

12, 13, 14, and 15. *Four John Clark (Mile-End) Bursaries*, annual value £30 each, tenable for four years, for Protestant students, sons or daughters of Protestant parents.

16. *Barbour Kilbarchan Bursary*, annual value about £20, tenable for three years, open only to candidates not exceeding 18 years of age from Kilbarchan Public School.

17 and 18. *Two Biggart Memorial Bursaries*, annual value £25, tenable for four years, for students preparing for the Ministry of the United Free Church.

19. *Brand Bursary*, annual value £27, tenable for four years, for students preparing for the Ministry of the United Free Church.

20. *Browne (Ayrshire) Bursary*, annual value about £22, tenable for four years, for natives of Ayrshire, or those who have been educated for not less than four years in Ayrshire.

21. *Brown-Paton Bursary*, annual value about £16, tenable for three years. Preference to natives of Loudon or Galston, whom failing, to candidates from any part of Ayrshire.

22. *Craig Bursary*, annual value of £25, tenable for four years. Apply to W. H. Hill, LL.D., Clerk to the Merchants' House, before the first of September.

23. *James Ewing Entrance Bursary*, annual value £20, tenable for four years, for sons of Glasgow merchants. Apply to W. H. Hill, LL.D., Clerk to the Merchants' House, before the first day of September.

24. *Merchants' House Bursary*, annual value £25, tenable for four years. Apply to W. H. Hill, LL.D., Clerk to the Merchants' House, before the first day of September.

25. *Archibald Craig Bursary*, annual value £9, tenable for two years, for students who are natives of Eaglesham or Mearns, or who for two consecutive years have attended school in either of these parishes.

26. *Davidson Bursary*, annual value £32, tenable for three years. Preference, *ceteris paribus*, to the Founder's relatives, and to natives of Muirkirk, Dalserf, Lesmahagow, and Loudon.

27. *Denny Bursary*, annual value £30, tenable for four years, for students from Dumbarton Burgh Academy. [Tenable in any Faculty.]

28, 29, and 30. *Three Fullarton of Overton Bursaries*, annual value £22 each, tenable for two years, for students under 25 years of age, from the district of Cunninghame, in Ayrshire. Subjects for Examination—Latin, Elementary Mathematics, and English.

31. *Hamilton Educational Trust Bursary*, annual value £20, tenable for three years, open to pupils attending public or State-aided schools in the Burgh and Parish of Hamilton. Apply to Mr. Patrick Keith, Writer, Hamilton, before the first day of September.

32. *Hannay Bursary*, annual value about £15, tenable for three years, for students preparing for the Ministry of any Evangelical Religious Denomination in Scotland. Apply to Mr. Robert Brodie, 77 St. Vincent Street, before the first day of September.

33 and 34. *Two Glasgow Highland Society's Bursaries*, annual value £20 each, tenable for four years, for students of Highland descent. Apply to Mr. Hugh Brown, Junr., 58 St. Vincent Street, on or before the fifteenth day of August.

35 and 36. *Two Glasgow City Educational Endowments Bursaries*, annual value £25 each, tenable for four years, for students from public or State-aided schools in Glasgow. Apply to Mr. W. H. Macdonald, Hutchesons' Buildings, Ingram Street, before the first day of September.

37, 38, 39, 40, and 41. *Five Hutchesons' Educational Trust Bursaries*, annual value £20 each, tenable for four years, for students who have attended for at least two years immediately preceding the competition, and completed the curriculum in the secondary department of Hutchesons' Grammar School. Apply to Mr. W. H. Macdonald, Hutchesons' Buildings, Ingram Street, before the first day of September.

42 and 43. *Two James Laing Bursaries*, annual value £25 each, tenable for four years, for students of either sex who have been educated for at least three years in a school or schools in Stirlingshire. Apply to Mr. William Jenkins, Writer, Denny, before the first day of September.

44. *James Lochhead Bursary*, annual value £16, tenable for three years. Preference to students of the name of Lochhead, whose parents are members of the Established Church of Scotland.

45a and 45b. *Two M'Crie Bursaries*, annual value £25 each, tenable for four years, subject to the conditions noted at p. 345. Apply to P. A. Thomson, Esq., Town Clerk, Ayr, before the first day of September.

46. *M'Culloch Bursary*, annual value £17, tenable for four years, for students educated not less than three years at a school or schools in Greenock.

47, 48, 49, and 50. *Four Marshall Trust Bursaries*, annual value £30 each, tenable for five years, for students of either sex from public or State-aided schools in Lanarkshire or Stirlingshire. Apply to William Mitchell, LL.D., 134 Wellington Street, Glasgow, before the first day of September.

51. *Glasgow Perthshire Society Bursary*, annual value £25, tenable for three years, for students connected with the county of Perth. Apply to Messrs. George Gray & Son, County Buildings, Glasgow, before the twenty-fifth day of August.

52. *Pollock Bursary*, annual value £37, tenable for three years. Preference to candidates educated in Paisley.

53 and 54. *Two Pratt Bursaries*, annual value £20 each, tenable for four years, for students from the parishes of Wiston, Roberton, or Lamington. Apply to Messrs. Fyfe, MacLean & Co., 115 St. Vincent Street, before the first day of September. [Tenable in any Faculty.]

55. *William Whyte Bursary*, annual value £25, tenable for four years, open to students who have attended and completed the curriculum in the secondary department of Hutchesons' Grammar School. Apply to Messrs. Hill & Hoggan, 194 Ingram Street, on or before the first day of September. [Tenable also in Law or Medicine.]

56, 57, and 58. *Three James A. Paterson Bursaries*, annual value £30, £20, and £10 respectively, tenable for three years, for students preparing for the Ministry of the United Free Church. The subjects of examination are Greek and Hebrew, as detailed at page 359.

59. *James Paterson Bursary*, annual value £20, tenable for three years. The subjects of examination are Latin, Greek, Hebrew, and Logic, as detailed at page 359.

60. *James Thomson Philosophical Bursary*, annual value £10, tenable for two years. The subjects of examination are the same as the English Literature subjects for the Lorimer Bursary, No. 63.

FOR STUDENTS ENTERING THE SECOND SESSION IN ARTS.

Nos. 7, 9, 19, 26, 28, 29, 30, 42, 43, 56, 57, 58, 59, 60, in the preceding list.

61. *Park General Council*, annual value £20, tenable for two years—open.

62. *Lorimer Bursary*, annual value £24, tenable for three years. The examination will take place along with the Arts Preliminary Examination in Mathematics, but may embrace higher papers.

63. *Lorimer Bursary*, annual value £24, tenable for three years. Subjects of examination—1. *Logic*: (a) Descartes, *Meditations* (Veitch's translation); (b) Ferrier, *Lectures on Greek Philosophy*, the Pre-Socratic period. 2. *English Literature*: (a) Shakespeare's *As You Like It*; (b) Tennyson's *Idylls of the King*.

FOR STUDENTS IN ARTS WITHOUT RESTRICTION TO A PARTICULAR SESSION.

64. *Monteith Bursary*, annual value about £14, tenable for three years. Open only to natives of Scotland and sons of Scottish parents. Examination in German.

65. *Muir Junior Bursary in Mathematics*, annual value £8, tenable for sessions 1907-8, 1908-9. The appointment will be determined by the results of the written examinations passed in the course of the session 1906-7 by the public students of the Ordinary Class of Mathematics.

66. *Muir Senior Bursary in Mathematics*, annual value £16, tenable for session 1907-8. The appointment will be determined by the results of the written examinations passed in the course of the session 1906-7 by the public students of the Intermediate Honours Mathematical Class.

67. *Lanfine Bursary in Economic Science*, annual value £27, tenable for two years.

68. *Lanfine Bursary in History*, annual value £27, tenable for two years.

69. *Lanfane Bursary in Semitic Languages*, annual value £27, tenable for two years.

70. *Malcolm Kerr Bursary*, annual value £22, tenable for three years. The subjects of examination are in Natural Philosophy, and are the same as for the ordinary degree of M.A.

71. *James Ferguson Bursary*, annual value £95, tenable for two years. Preference, *cæteris paribus*, to natives of Lesmahagow or Muirkirk, or Pictou, Nova Scotia, and also to students of the name Ferguson or Weir, or to the kin of the Founder. The examination is the same as that for Honours in Mathematics and Natural Philosophy.

FOR STUDENTS IN ARTS, OR LAW, OR MEDICINE.

72. *Macdonald Bursary*, annual value £15, tenable for four years, for miners under the age of 21 years. Examination in writing, arithmetic, geography, grammar, and history. For the *William Whyte Bursary*, see No. 55, and for the *Andrew and Bethia Stewart Bursaries*, see p. 366.

2.—FELLOWSHIPS, SCHOLARSHIPS, ETC.

73. *Armagh Bursary in Classics*, annual value £48, tenable for two years in Theology, Law, or Medicine. Open to students who are presenting themselves for the final examination for the degree of M.A. with Honours in Classics.

74. *John Clark (Mile-End) Scholarship in Classics*, annual value £50, tenable for four years. Open to all Protestant students of good moral character, sons or daughters of Protestant parents, and who have completed their curriculum in Arts in Glasgow University.

75. (*Sir Walter*) *Scott Scholarship*, annual value £80, tenable for two years. Open to Glasgow Masters of Arts. Examination in Classics and English Literature (not Language) from Chaucer downwards.

76. *George A. Clark Scholarship in Mental Philosophy*, annual value about £168, tenable for four years. Open to Glasgow Masters of Arts with Honours, or students presenting themselves for the M.A. degree with Honours in Mental Philosophy, but no student shall be eligible for the examination after the expiration of more than eight winter sessions from the time of his first entering a class qualifying for the M.A. degree.

77. *Armagh Bursary in Mental Philosophy*, annual value £48, tenable for three years in Theology, Law, or Medicine. Open to students who are presenting themselves for the final examination for the degree of M.A. with Honours in Mental Philosophy.

78. *John Clark (Mile-End) Scholarship in Mental Philosophy*, annual value £50, tenable for four years. Open to all Protestant students of good moral character, sons or daughters of Protestant parents, and who have completed their curriculum in Arts in Glasgow University.

79. *William Ewing Fellowship in Mental Philosophy*, annual value £100, tenable for three years. Open to Glasgow Masters of Arts.

80. *Eglinton Fellowship in English*, annual value £65, tenable for three years. Open to Glasgow Masters of Arts who have graduated in April or November, 1906.

81. *Mackinnon Scholarships in Modern Languages*, £50 in value, tenable for one year, for proficiency in Modern Languages—open to all matriculated students.

82. *John Clark (Mile-End) Scholarship in Economic Science*, annual value £50, tenable for four years. Open to all Protestant students of good moral character, sons or daughters of Protestant parents, and who have completed their curriculum in Arts in Glasgow University.

83. *Gladstone Memorial Prize* of books to the value of £5 is open to graduates of this University who have taken the degree of M.A. with Honours or to students presenting themselves in October, 1906, for examination for the Degree of M.A. with Honours in Economic Science, but no one whose Arts course began before session 1890-91 is eligible. See p. 406.

84. *Snell Exhibition*, annual value about £133, tenable for three years. Candidates must have been born in Scotland, or must be sons of fathers born in Scotland, and must "have resided as undergraduate students for two years at least in Glasgow College, or for one year in that College and two at least in some other College in Scotland."

85. *Luke Historical Prize* of £9 open to students who have attended, during session 1905-6, any Greek or Latin class.

86. *Thomas Logan Memorial Medal and Prize* will be awarded in April, 1907, to the graduate in Arts of the year 1906 who shall have obtained the highest marks in the Degree examinations.

DATES OF EXAMINATIONS.

The examinations for Bursaries Nos. 1 to 55 and 61 in the above list will commence on Friday, 28th September, at 9 a.m. The examination papers will be given in the following order, viz. :—

On Friday,	28th September,	9—11 a.m., English (1st paper).
"	"	12— 2 p.m., Higher Latin (1st paper).
"	"	3— 6 p.m., Lower Latin.
On Saturday,	29th	9—11 a.m., English (2nd paper).
"	"	12— 2 p.m., Intermediate and Higher Mathematics (1st paper).
"	"	3— 6 p.m., Lower Greek.
On Monday,	1st October,	9—11 a.m., Higher Latin (2nd paper).
"	"	12— 2 p.m., Intermediate and Higher Mathematics (2nd paper).
"	"	3— 6 p.m., Lower Mathematics.
On Tuesday,	2nd October,	9—11 a.m., Higher Greek (1st paper).
"	"	12— 1.30 p.m., French (1st paper).
"	"	3— 6 p.m., Dynamics.
On Wednesday,	3rd	9—11 a.m., Higher Greek (2nd paper).
"	"	12— 2 p.m., French (2nd paper).
"	"	3— 4.30 p.m., German (1st paper).

On Thursday,	4th October,	9—11 a.m., German (2nd paper).
"	"	12— 1.30 p.m., Italian (1st paper).
"	"	12— 2 p.m., German (additional paper).
"	"	3— 5 p.m., Italian (2nd paper).
"	"	3— 5 p.m., French (additional paper).
On Friday,	5th	9—11 a.m., Mathematics (additional paper).
"	"	12— 2 p.m., Latin (additional paper).
"	"	3— 5 p.m. Greek (additional paper).
On Saturday,	6th	12— 2 p.m., Dynamics (additional paper).

The examinations for Bursaries Nos. 56 to 59, on Tuesday, 23rd Oct., at 9 a.m., and Wednesday, 24th Oct., at 2 p.m.; for Bursary No. 60, on Saturday, 6th October, at 2 p.m.; for Bursary No. 62, on Saturday, 29th September, at 12 noon, Monday, 1st October, at 12 noon, and Friday, 5th October, at 9 a.m.; for Bursary No. 63, on Wednesday, 3rd October, at 2 p.m., and on Saturday, 6th October, at 2 p.m.; for Bursary No. 64, on Tuesday, 2nd October, at 12 noon, Wednesday, 3rd October, at 12 noon, and Thursday, 4th October, at 3 p.m.; for Bursary No. 70, on Friday, 5th October, at 9 a.m. and 2 p.m. The examinations for the Bursary No. 72 will be held on Thursday, 27th September, at 9 a.m. and 2 p.m.

The examinations for the Bursaries, Scholarships, and Fellowships No. 71 and Nos. 73 to 83 inclusive, in the above list, will be held along with the examinations for Honours in the several departments for the Degree of M.A. in September-October, 1906; for No. 84 along with the examinations for Honours, in March and April, 1907, the English paper being taken on Saturday, 6th April, at 9 a.m.; and for the Prize No. 85 in January, 1907.

DATES FOR SENDING IN APPLICATIONS.

Candidates for the Bursaries Nos. 1 to 62 inclusive, and Nos. 64 and 72 are required to give in their names to the Assistant Clerk (Matriculation Office), not later than Monday, 10th September; and for Bursaries Nos. 63 and 71, not later than Wednesday, 19th September; and for Bursaries Nos. 67 to 69, not later than 12th March, 1907. A schedule, which is to be filled up by each candidate, may be obtained from the Assistant Clerk (Matriculation Office). Candidates for the Bursaries Nos. 22 to 24 must, besides, give in their names to W. H. Hill, LL.D., Clerk to the Merchants' House, before the first day of September; for No. 31, to Mr. Patrick Keith, Writer, Hamilton, before the first day of September; for No. 32, to Mr. Robert Brodie, 77 St. Vincent Street, before the first day of September; for Nos. 33 and 34, to Mr. Hugh Brown, Jun., 58 St. Vincent Street, before the fifteenth day of August; for Nos. 35 to 41, to Mr. W. H. Macdonald, Hutchesons' Buildings, Ingram Street, before the first day of September; for Nos. 42 and 43, to Mr. William Jenkins, Writer, Denny, before the first day of September; for Nos. 45*a* and 45*b*, to Mr. P. A. Thomson, Town Clerk, Ayr, before the first day of September; for Nos. 47 to 50, to William Mitchell, LL.D., 134 Wellington Street, before the first day of September; for No. 51, to Messrs. George Gray & Son, County Buildings, Glasgow, before the twenty-fifth day of August; for Nos. 53 and 54 to Messrs. Fyfe, MacLean & Co., 115 St. Vincent Street, before

the first day of September; and for No. 55, to Messrs. Hill & Hoggan, 194 Ingram Street, before the first day of September.

Candidates for the Fellowships, etc., Nos. 73 to 83 inclusive, are required to give in their names to the Assistant Clerk (Matriculation Office), not later than 19th September; and for No. 85 before 1st December, 1906. For No. 84 candidates are expected to inscribe their names in a book kept at the Clerk of Senate's office for the purpose, not later than the 1st December, 1906.

B.—FACULTY OF SCIENCE.

Open to Competition during Session 1906-7.

1 and 2. *Two Strang Bursaries*, annual value £20, tenable for three years. Open to students of Engineering Science.

3 and 4. *Two Agricultural College Bursaries*, annual value £40 and £35, tenable for four years, for students of Agriculture.

5. *Donald Cuthbertson Bursary*, annual value £32, tenable for three years, open to students of Pure Science.

6. *Lorimer Bursary in Mathematics*—see No. 62 under Faculty of Arts.

7 and 8. *Two Metcalfe Bursaries*, each of annual value £25, tenable for two years. Open to students entering the class of Chemistry or of Intermediate Honours Mathematics.

9. *Lloyd's Register Scholarship*, annual value £50, tenable for three years. Open to candidates intending to become students of Naval Architecture whose age does not exceed 23 years.

10. *Malcolm Kerr Bursary*—see No. 70 under Faculty of Arts.

11. *Malcolm Kerr Bursary*, annual value £22, tenable for three years. The subjects of examination are in Chemistry, and are those for the Final Examination for B.Sc.

12. *George Young Bursary*, annual value £35, tenable for one year, for students in the class of Civil Engineering. To be awarded in October, 1906, to the eligible candidate with the best record in the First Science Examination.

13 and 14. *Muir Bursaries in Mathematics*—see Nos. 65 and 66 under Faculty of Arts.

15 and 16. *Muir Bursaries in Civil Engineering and Mechanics*, each of annual value £12 10s., tenable for session 1907-8. See p. 357.

17. *Robert Donaldson Scholarship in Biology*, £64, tenable for two years. See p. 380.

18. *James Watt Scholarship*, annual value £37, tenable for two years, for a Bachelor of Science of not more than two years' standing. See p. 398.

19. *Kirk Memorial Prize of £14* for students completing Final Science Examination for B.Sc. on the side of Naval Architecture. See p. 408.

20. *Lindsay Burnet Silver Medal*, for a Thesis in Engineering. See page 401.

The examinations for the Bursaries Nos. 1 to 5 will be held at the same time as the Arts and Science Preliminary Examinations in September-October, 1906; for No. 6 on Saturday, 29th September, at 12 noon, Monday, 1st October, at 12 noon, and Friday, 5th October, at 9 a.m.; for Nos. 7 and 8 on Friday, 28th September, at 9 a.m. and 3 p.m., on Saturday, 29th September, at 9 a.m., on Monday, 1st October, at 9 a.m. and 3 p.m., and on Friday, 5th October, at 9 a.m. and 2 p.m.; for No. 9 on Saturday, 29th September, at 12 noon, on Monday, 1st October, at 12 noon, on Tuesday, 2nd October, at 3 p.m., on Friday, 5th October, at 9 a.m., and on Saturday, 6th October, at 12 noon; for No. 10 on Friday, 5th October, at 9 a.m. and 2 p.m.; and for No. 11 on Monday, 1st October, at 2 p.m.

Names of Competitors to be given in to the Assistant Clerk (Matriculation Office), for Nos. 1 to 6 on 10th September, for Nos. 7 to 11 and for No. 17 on 19th September, and for Nos. 15 and 16 on 14th March, 1907.

For the *Denny Bursary*, the *Taylor Bursary*, the *James Ferguson Bursary*, the 1851 *Exhibition Science Scholarships*, the *Dobbie Smith Gold Medal*, the *George Harvey Prize*, the *G. R. Muirhead Prize*, and the *Walker Prizes*, see pages 320, 369, 322, 383, 404, 407, 409, 411 respectively.

C.—FACULTY OF MEDICINE.

1. *Mackintosh Bursary*, annual value about £31, tenable for one year. Open to medical students of either sex who have attended the Lectures on Insanity.

2 and 3. *Two Glasgow Highland Society Bursaries*, annual value of each £25, tenable for five years, for students of Highland descent. Apply to Mr. Hugh Brown, Jun., 58 St. Vincent Street, on or before 15th August.

4. *Lorimer Bursary*, annual value £24, tenable for three years. Open to medical students entering on their second winter session.

5. *Rainy Bursary*, annual value £20, tenable for two years. Open to students entering on their fourth session of medical study. See page 363.

6 and 7. *Two James A. Paterson Bursaries*, annual value £25 and £20 respectively, tenable for four years. Open to students entering on their first or second session of medical study. Examination in Mathematics and Dynamics.

8. *Dr. Thomas Gibson Bursary*, annual value £36, tenable for four years. Open to medical students entering on their second winter session who are preparing for service as medical missionaries. It will be awarded to the qualified candidate who has gained the highest number of marks in the First Professional Examination. See p. 329.

9. *John Monteith Bursary*, annual value about £21, tenable for two years, will be awarded in November to the student who gains the highest number of marks in Anatomy and Physiology in March and October, 1906.

10. *Andrew Weir Bursary*, annual value £16, tenable for one year, will be awarded in November in accordance with results of Second and Third Professional Examinations.

11. *Junior Arnott Prize*, of about £15, for an examination in General Physics, open to students of the first and second years of their medical studies.

12. *Senior Arnott Prize*, of £25, for an examination in Physiological Physics, open to students of the third and fourth years of their medical studies.

13. *Brunton Memorial Prize*, of about £10, is given to the most distinguished graduate in Medicine of the year.

For the *Denny*, the *Hutchesons' Educational Trust*, the *Pratt*, the *William Whyte*, the *Macdonald*, the *Armagh*, and the *James Ferguson Bursaries*, also tenable by students of Medicine, see Nos. 27, 37 to 41, 53, 54, 55, 72, 73, 77, and 71, under Faculty of Arts. For the *Andrew and Bethia Stewart Bursaries*, see p. 366; and for *M'Cunn Research Scholarships* tenable by Graduates, see p. 389.

DATES OF EXAMINATIONS.

The examinations for the Bursary No. 1 in the above list will be held in June, for Nos. 2 and 3, at the same time as the Medical Preliminary; for No. 4 on Monday, 1st October, at 2 p.m., on Tuesday, 2nd October, at 9 a.m. and 12 noon; for Nos. 6 and 7, on Saturday, 29th September, at 12 noon; Monday, 1st October, at 12 noon; Tuesday, 2nd October, at 3 p.m.; Friday, 5th October, at 9 a.m., and Saturday, 6th October, at 12 noon; and for the Prizes Nos. 11 and 12 on Friday, 5th October, at 2 p.m.

DATES FOR SENDING IN APPLICATIONS.

Candidates for the Bursary No. 1 are required to give in their names to the Assistant Clerk (Matriculation Office), not later than 1st June; for Bursaries Nos. 2 to 7, not later than 10th September; and for Prizes 11 and 12, not later than 19th September.

D.—FACULTY OF LAW.

1. *Major Young's Fund Bursary*, annual value £22, tenable for two years, open to students of the first year in Law. Names of candidates to be given in not later than 10th September. Competitors for No. 1 are required to attend the Arts Preliminary and Bursary Examination. For subjects and times see pp. 418, 419.

2. *Robert Macfarlane Bursary*, annual value about £27, for proficiency in Scots Law, tenable during session 1907-8. See p. 348.

3. *Robert Macfarlane Bursary*, annual value about £27, for proficiency in Conveyancing, tenable during session 1907-8. See p. 348.

4. *Andrew Cunninghame Bursary*, value about £35, tenable for one year, for proficiency in Scots Law. See p. 319.

5. *Andrew Cunninghame Bursary*, value about £35, tenable for one year, for proficiency in Conveyancing. See p. 319.

Names of Candidates for the Bursaries, Nos. 2 to 5 are to be given in to the Assistant Clerk (Matriculation Office), not later than 12th March.

6. *Walkinshaw Young Bursary*, annual value £16, tenable for two years, open to students who, since 1st December, 1904, have at an examination in Arts for the degree of B.L. passed in two Arts subjects, or have at one examination passed in any two subjects for the degree of M.A. Applications to be lodged with the Clerk of Senate on or before 1st December, 1906.

For the *Denny*, the *Hutchesons' Educational Trust*, the *Pratt*, the *William Whyte*, the *Mardonald*, the *Armagh*, and the *James Ferguson Bursaries*, also tenable by students of Law, see Nos. 27, 37 to 41, 53, 54, 55, 72, 73, 77 and 71, under Faculty of Arts. For the *Andrew and Bethia Stewart Bursaries* see p. 366.

E.—FACULTY OF THEOLOGY.

Open to Competition during Session 1906-1907.

1 and 2. *Two John Adam Bursaries*, each of the annual value of £18, tenable for four years. Open to students of Theology of the first year.

3. *Black Bursary*, annual value £38, tenable for three years. Open to students of Theology of the first year who are qualified as specified at p. 311.

4. *Hastie Bursary*, annual value £25, tenable for three years. Open to students of Theology of the first year who are Masters of Arts of any Scottish University, or who have passed all the examinations for graduation in Arts.

5. *Lorimer Bursary*, annual value £24, tenable for three years. Open to students entering the Divinity Hall.

6. *Matthew A. Muir Bursary*, annual value £32, tenable for three years. Open to students of Divinity of the first year who hold a degree in Arts of any Scottish University, or who have passed their examinations in four subjects, taken out of at least two departments, for graduation in Arts.

7. *Notman Bursary*, annual value, £18 tenable in the Divinity course.

8. *Lumsden Bursary*, annual value £15, tenable for four years. Open to students of Divinity of the first year, with a preference to the sons of members, or of deceased members, of the Stationers' Company of Glasgow.

9. *William Muir Divinity Bursary*, annual value £25, tenable for two years. Open to candidates who have passed the examination of the Examining Board for entrance to the Divinity Hall of the University. Apply to Mr. W. H. Macdonald, Hutchesons' Buildings, Ingram Street, not later than 10th October.

10. *Black Theological Fellowship*, annual value about £133, tenable for one year. Open to Masters of Arts from any of the Universities of Scotland who shall complete the ordinary curriculum of Theological study in the University of Glasgow in March, 1907.

11. *The Findlater Scholarship Prize*, value about £38 sterling, for examination in the subjects for the degree of B.D. Open to students who shall complete the ordinary curriculum of Theological study in the University of Glasgow in March, 1907.

12. *The Jamieson Prize*, value about £10 sterling, for examination in the subjects for the degree of B.D. Open to students who shall complete the ordinary curriculum of Theological study in the University of Glasgow in March, 1907.

13. *The Marfarlan and Cook Testimonial Prize*, of £21, open to Theological students of three years' standing. Examination in Greek, Moral Philosophy, Hebrew, Church History, and Divinity.

14 and 15. *Dowanhill Prizes*, one of £20, and the other of £10, for Elocution. Open to students of Divinity of the third year.

For the *Armagh* and the *James Ferguson Bursaries*, also tenable by students of Divinity, see Nos. 73, 77, and 71 under Faculty of Arts.

DATES OF EXAMINATIONS.

The examinations for Nos. 1 to 9 inclusive, in the above list, will be held on Tuesday, 23rd October, and Wednesday, 24th October, at 9 a.m. each day; and for Nos. 10 to 12, on Tuesday, 23rd October, Wednesday, 24th October, Thursday, 4th April, and Friday, 5th April, at 9 a.m. each day.

SUBJECTS OF EXAMINATION.

Candidates for Bursaries Nos. 1 to 9 inclusive may select any seven out of the nine subjects in the following list, but candidates for Nos. 1 and 2 must not in making their selection leave out any of the first six subjects:—

LATIN.—Horace, *Ars Poetica*; Translation from English into Latin.

GREEK.—The Gospel according to Mark.

LOGIC.—Jevons, *Elementary Lessons in Logic*.

MORAL PHILOSOPHY.—Muirhead, *Elements of Ethics*.

MATHEMATICS.—Euclid, Books I., II., III. Algebra to Quadratic Equations, inclusive.

NATURAL PHILOSOPHY.—Deschanel, *Physics*, Part I.

ENGLISH.—Morley, *First Sketch of English Literature*, Chapter XIII. A short essay will be prescribed.

HEBREW.—Book of Genesis.

HISTORY.—European History in the Sixteenth Century.

The subjects of examination for Nos. 10, 11, 12 are the same as for the Degree of Bachelor of Divinity.

The subjects of examination for the Prize No. 13 for Session 1906-7 are as follows:—

GREEK.—Sophocles, *Antigone*.

DIVINITY.—Biblical Theology.—The Epistle to the Romans.

HEBREW.—Isaiah, Chaps. xl.-lxvi.

CHURCH HISTORY.—History of the Church in England, Scotland, and Ireland from 1702 to 1760.

MORAL PHILOSOPHY.—Butler, *Three Sermons on Human Nature*.

DATES FOR SENDING IN APPLICATIONS.

Candidates for Nos. 1 to 12 inclusive are required to give in their names to the Assistant Clerk (Matriculation Office), not later than 17th October, 1906; for the Prize No. 13 to the Professor of Divinity, not later than 1st November, 1906; and for the Prizes Nos. 14 and 15, to the Professor of Divinity, not later than 21st March, 1907.

5.—PATRONAGE BURSARIES, 1906-7.

A.—FACULTY OF ARTS.

Appointments to the following Bursaries in the gift of Patrons, including bodies corporate and not corporate, fall to be made before the opening of session 1906-7. Candidates are required to present themselves for the Arts Preliminary Examinations, and for this purpose their names must be given in to the Assistant Clerk (Matriculation Office), on or before 4th September.

1. *Dundonald Bursary*, see page 321.
2. *Hamilton Bursary*, see page 332.
3. *Leadbetter Bursary*, see page 340.
4. *Williams Bursary*, see page 372.

B.—FACULTY OF THEOLOGY.

1. *Dundonald Bursary*, see page 321.
2. *Gilhagie and Struthers Bursary*, see page 329.
4. *Hamilton Bursary*, see page 332.

N.B.—For information regarding the Auld Bursary and the Sharp Bursary in the gift of the Presbytery of Perth for students preparing for the ministry of the Church of Scotland, apply to the Clerk of the Presbytery, the Rev. John Ferguson, B.D., Aberdalgie, Perth.

6.—UNIVERSITY PRIZE ESSAYS.

FOR SESSION 1906-7.

1. In Mental Philosophy, the UNIVERSITY SILVER MEDAL, for the best essay on "Bradley's Conception of Reality." All students of the Classes of Logic, Moral Philosophy or English Literature, in Session 1905-6 or 1906-7, may be competitors.

2. THE EWING GOLD MEDAL, for the best essay on "Fletcher of Saltoun." All Matriculated Students of the University in Session 1906-7 may be Competitors.

3. A COULTER PRIZE OF FIVE POUNDS, for the best essay on "Exposition and Criticism of the Ritschlian Theology."

4. A COULTER PRIZE OF FIVE POUNDS, for the best essay on the "History of the Colony at Cumae in Campania."

For the Coulter Prizes all matriculated students of the University in session 1906-7 may be competitors.

5. The HENDERSON PRIZE OF TWENTY GUINEAS, for the best essay on "The Theory of Evolution in relation to Christian Life and Doctrine." All matriculated students of the University in session 1906-7, and all Masters of Arts who graduated in November, 1901, or thereafter, may be competitors.

6. COBDEN PRIZE OF TWENTY POUNDS AND A SILVER MEDAL. See p. 403. The following is the subject for the next competition:—"The effects of Free Trade on Ireland and the probable effects of a resumption of Protection there." Members of the University of not more than six years' standing may compete. Essays, signed with a motto, to be sent in to the Clerk of Senate by 1st October, 1906.

7. THE DOBBIE-SMITH GOLD MEDAL, for the best description and illustration of the external characters, structure, development, and processes of reproduction, with drawings and specimens, of any one of the following plants, viz., the common mustard, the sycamore, and barley. All matriculated students of the University in session 1905-6 or 1906-7 may be competitors. Essays to be given in to the Principal on or before 1st Dec., 1906.

The subject for the DOBBIE-SMITH GOLD MEDAL, open to matriculated students in session 1907-8, will be the same as that given above for session 1906-7. Essays to be given in to the Principal on or before 1st December, 1907.

The essays, with the exceptions noted above (Nos. 6 and 7), must be given in to the Principal on or before Wednesday, 31st Oct., 1906, after which day none can be received. Each must be distinguished by two mottoes, and accompanied by a sealed letter bearing on the outside the same mottoes, and containing a declaration subscribed by the author that the essay is entirely of his own composition. All quotations in the essays must be carefully marked and accurate references to their respective authorities given in the notes. The Senate reserves the power of withholding the prize for any subject, if none of the essays on that subject reaches a sufficiently high standard of merit.

FOR SESSION 1907-8.

The subject for the essay in the competition for the GARTMORE GOLD MEDAL, open to Matriculated Students in Session 1907-8, will be "The ethical and political aspects of Municipal Trading."

XI.--HONOURS LIST.

NAMES OF GRADUATES WITH HONOURS SINCE THE YEAR 1827.

BACHELORS OF ARTS (B.A.).

		Honourable Distinction.	Highest Distinction.
1827	¹ Alfred Day, . . . England,	. . . .	{ Classics. Mental Philosophy.
1831	James Halley, . . . Scotland,	. . . .	{ Classics. Mental Philosophy.
1838	William Makellar, . . . „	Classics.	
„	Francis Tucker, . . . England,	Classics.	
1840	¹ John Daniel Morell, . . . „	{ Classics. Mental Philosophy.	
1842	¹ Nathaniel Haycroft, . . . „	{ Classics. Mental Philosophy.	
1843	¹ David M'Lauchlan, . . . Scotland,	{ Classics. Mental Philosophy.	
1852	Samuel Crusha Sarjant, England,	. . . .	{ Classics. Mental Philosophy.
1856	¹ Joseph David Everett, . . . „	{ Classics. Mental Philosophy.	
„	David Johnston, . . . „	Mental Philosophy.	
1857	Wm. Thomson Johnston, Scotland,	. . . .	Classics.
„	Andrew Moody, . . . „	Mental Philosophy.	
„	¹ William Ralph Pattison, . . . „	{ Classics. Mental Philosophy.	
1858	John MacLeod, . . . „	. . . .	Mental Philosophy.
„	² Peter Sinclair Menzies, . . . „	Classics.	
1859	¹ George Porter, . . . „	{ Classics. Mental Philosophy.	
„	¹ Joseph Gardner, . . . „	Mental Philosophy.	
1860	¹ Richard Vary Campbell, . . . „	. . . .	Mental Philosophy.
„	¹ Daniel Munro, . . . „	Classics.	
1861	¹ John M'Lean, . . . „	{ Classics. Mental Philosophy.	
„	¹ Thomas Carruthers, . . . „	{ Classics. Mental Philosophy.	
„	¹ William Stewart, . . . „	{ Classics. Mental Philosophy.	
„	³ David Thomas, . . . „	Mental Philosophy.	
„	¹ George Matheson, . . . „	Mental Philosophy.	
„	¹ Henry William Bell, . . . India,	Mental Philosophy.	
„	¹ Thomas Robinson, . . . England,	Mental Philosophy.	

¹ Graduated M.A. in the following year.

² Graduated M.A. three years later.

³ Graduated M.A. two years later.

MASTERS OF ARTS (M.A.).

		Honourable Distinction.	Highest Distinction.
1827	George Samuel Evans, . England,	. . . .	{ Classics. { Mental Philosophy.
„	William Cooper, . . Scotland,	{ Classics. { Mental Philosophy.	
1828	William Acworth, . England,	. . . .	{ Classics. { Mental Philosophy.
„	Samuel Macurdy Greer, Ireland,	. . . .	{ Classics. { Mental Philosophy.
„	James Rankine, . . Scotland,	{ Classics. { Mental Philosophy.	
„	William Baird, . . „	{ Classics. { Mental Philosophy.	
„	John Reid, . . England,	Physical Science.	
„	Alexander Ure, . . Scotland,	Physical Science.	
1831	David L. Arnot, . . „	. . . .	Classics.
„	John Jenkins, . . Wales,	Classics.	
„	Robert Cotton Mather, . England,	Classics.	
„	Neil M'Michael, . . Scotland,	Physical Science.	
1832	Andrew Borland Parker, „	. . . .	Classics.
1836	John Cunningham, . „	. . . .	Physical Science.
„	William Fulton, . . „	{ Classics. { Mental Philosophy.	
1837	Richard Shaen, . . England,	Physical Science.	
„	Thomas Elliot Richardson, „	Physical Science.	
„	John Blair, . . Ireland,	Physical Science.	
„	William Cuthell, . . Scotland,	Physical Science.	
1840	Duncan Harkness Weir, „	Physical Science.	
„	James Thomson, . . Ireland,	Physical Science.	
„	John Buchanan, . . Scotland,	Physical Science.	
1841	William Arthur Jones, Wales,	{ Classics. { Mental Philosophy.	
1842	Alexander Grierson, . Scotland,	Physical Science.	
„	John Davies, . . England,	{ Classics. { Mental Philosophy.	
1843	John Trafford, . . „	{ Classics. { Mental Philosophy.	
„	David Duff, . . Scotland,	Physical Science.	
1844	John Morgan, . . „	Physical Science.	
„	John Thomson, . . Ireland,	Physical Science.	
„	William Turnbull Ker, . Scotland,	Physical Science.	
„	Richard Tomlinson, . England,	{ Classics. { Mental Philosophy.	
1846	Robert Graham, . . Scotland,	Physical Science.	
1847	William John Steele, . Ireland,	Physical Science.	
„	James Porter, . . „	Physical Science.	
1848	Adam Milroy, . . Scotland,	{ Classics. { Mental Philosophy.	
„	Walter David Jeremy, . England,	{ Classics. { Mental Philosophy.	

		Honourable Distinction.	Highest Distinction.
1849	John Kerr, . . . Scotland,	. . . .	Physical Science.
"	George M'Queen, . . . "	. . . .	Physical Science.
"	Henry Martyn Barker, . England,	. . . .	{ Classics.
"	John Newton Langley, . . "	. . . .	{ Mental Philosophy.
			{ Classics.
			{ Mental Philosophy.
1850	Alexander Walker, . Scotland,	{ Classics.	
"	Horatio Lindsay Taplin, England,	{ Mental Philosophy.	
"	Robert Masters Theobald, "	{ Classics.	
"	Carstairs Douglas, . Scotland,	{ Mental Philosophy.	
1851	Daniel Davies Jeremy, . England,	{ Physical Science.	
"	Thomas Logan, . . Scotland,	{ Classics.	
1852	James Wylie Johnston, "	{ Mental Philosophy.	
1853	Charles Abercromby Smith, "	. . . .	Physical Science.
"	William Jack, . . . "	. . . .	Physical Science.
"	Edward John Gibbs, . England,	. . . .	{ Classics.
"	James Galbraith, . . Scotland,	. . . .	{ Mental Philosophy.
1856	John Murray, . . . "	Physical Science.	
"	Joseph David Everett, . England,	Physical Science.	
1857	George Monro Grant, Nova Scotia,	. . . .	Physical Science.
"	David Herbert, . . . Scotland,	. . . .	Mental Philosophy.
"	Neil Macpherson, . . . "	Mental Philosophy.	
"		{ Classics.	
1858	John Weir, "	{ Mental Philosophy.	
1859	Robert Whyte, "	Mental Philosophy.	
1860	Walter Roberts, "	Mental Philosophy.	

MASTERS OF ARTS (M.A.).

Ordinances No. 14, Sections vi., vii., viii.; No. 18, Section iii. (1858).

		Class of Honours and Department.			
		Classics.	Mental Philos.	Math. & Nat. Phil.	Natural Science.
1862	John Ferguson, Scotland,	...	...	...	I
1866	John Mann, "	I	...	...	...
"	John Fergusson, "	...	II	...	...
1867	William E. Grigsby, . . . England,	II	...	...	...
"	James Smith, Scotland,	...	...	I	...
"	William Ross, . . . . "	...	...	II	...
1868	Robert Stewart, "	...	I	...	...
"	John Wilson, "	...	I	...	...

			Class of Honours and Department.			
			Classics.	Mental Philos.	Math. & Nat. Phil.	Natural Science.
1869	Favour James Greg,	Scotland,	...	I	...	...
"	Adam Semple,	"	...	I	...	...
"	Joseph Loudon,	"	...	...	II	...
"	James M'Intosh,	"	...	I	...	...
1870	John Cross,	U.S.A.,	I	I	...	...
"	Matthew M. Dickie,	England,	II	I	...	...
"	James Orr,	Scotland,	...	I	...	...
"	Robert A. Sinclair,	"	...	II	...	...
"	James D. H. Dickson,	"	...	...	II	...
"	Dugald M'Kichan,	"	...	...	II	...
1871	William S. Fleck,	"	...	I	...	...
"	William Oliver,	Wales,	...	II	...	...
"	John E. H. Thomson,	Scotland,	...	II	...	...
"	Colin R. M'Clymont,	"	...	I	...	...
"	Charles S. Dickson,	"	...	II	II	...
1872	William Hamilton,	"	...	I	...	...
"	John Watson,	"	...	I	...	...
"	Zachary M. H. Ross,	"	...	II	...	...
"	Archibald Russell,	"	...	II	...	...
"	William G. Miller,	"	...	...	II	...
"	John M. Brown,	"	...	I	...	...
"	Alexander S. Macpherson,	"	...	I	...	...
"	James C. MacTaggart,	"	...	...	I	...
"	James Henderson,	"	...	...	II	...
1873	William Bathgate,	"	I	...	...	...
"	John M'Cunn,	"	...	I	...	...
"	Thomas L. Galloway,	"	...	...	I	...
"	David Hunter,	"	II	I	...	...
"	Robert Harvey,	"	I	...	...	...
"	Thomas H. Miller,	"	...	...	I	...
"	Buchanan Blake,	"	...	II	...	...
"	James Arthur,	"	...	...	II	...
1874	James Bonar,	"	I	I	...	...
"	James G. Frazer,	"	I	...	...	...
"	Alexander F. Fraser,	"	...	I	...	...
"	John Wilson Reid,	"	I	...	II	...
"	Colin Campbell,	"	II	I	...	...
"	James Thomson,	"	...	I	...	...
"	Hugh Hart Currie,	"	II	...	...	...
"	James MacKay,	"	...	II	...	...
1875	Benjamin F. C. Costelloe,	Ireland,	II	I	...	...
"	William Yuill King,	Scotland,	I	...	...	...
"	William Patrick,	"	...	I	...	...
"	John Patrick,	"	II	...	...	...
"	James S. Russell,	"	...	...	I	...
"	John C. Watt,	"	...	...	I	...
"	John B. Douglas,	England,	II	...	...	...
"	Neil D. MacLachlan,	Scotland,	...	II	...	...
"	James Johnston Dobbie,	"	...	...	...	I
1876	James Lambie,	"	...	I	...	...
"	Ebenezer B. Speirs,	"	...	I	...	...

			<i>Class of Honours and Department.</i>			
			Classics.	Mental Philos.	Math. & Nat. Phil.	Natural Science.
1876	Islay F. Burns,	Scotland,	II	...	...	...
	Robert MacLehose,	"	...	II	...	...
	Joseph Conn, . . . .	"	...	...	II	...
	Robert H. Pinkerton, . . . .	"	...	...	II	...
	David Wilson, . . . .	"	...	...	II	...
	John P. Mitchell,	"	...	I	...	...
	William M. Rankin,	"	...	I	...	...
	Andrew Gray, . . . .	"	...	...	II	...
1877	Wallace M. Lindsay,	"	I	II	...	...
	Alexander S. Wilson, . . . .	"	...	...	...	I
	James Kidd,	"	...	I	...	...
	Thomas B. Kilpatrick,	"	...	I	...	...
	Mungo W. McCallum,	"	...	II	...	...
	William Allan, . . . .	"	...	...	II	...
	James Arthur, . . . .	"	...	...	II	...
1878	Robert Mackintosh,	"	II	I	...	...
	John Edgar,	"	I	...	...	...
	John M. Dodds, . . . .	"	...	...	I	...
	David W. Forrest,	"	...	II	...	...
	Alexander Isdale,	"	...	I	...	...
	Lewis A. Muirhead,	"	...	I	...	...
	James Wilson,	"	II	...	II	...
1879	John Wilson Marshall,	"	I	II	...	...
	Francis Wm. Clark,	"	II	II	...	...
	Henry Jones,	Wales,	...	I	...	...
	William T. Bankhead,	Scotland,	...	II	...	...
	Andrew Rutherford,	"	...	II	...	...
	James Thomson,	Ireland,	...	...	II	...
	James Denney,	Scotland,	I	I	...	...
	James Kippen Duff,	"	I	...	...	...
	Robert Tannahill Younger,	"	...	II	...	...
	William L. Macindoe, . . . .	"	...	...	II	...
1880	Alexander Gregory,	"	II	...	...	...
	Thomas Gregory,	"	I	I	I	...
	Alexander N. Cumming,	"	II	II	...	...
	Hugh Young Reyburn,	"	II	II	...	...
	John G. A. Dow,	"	II	...	...	...
	John Henderson,	"	...	II	...	...
1881	Cecil J. Swan,	"	II	...	...	...
	Francis H. Stead,	England,	II	I	...	...
	David S. Adam,	Scotland,	...	I	...	...
	William Granger,	"	...	I	...	...
	Robert F. Muirhead, B.Sc., . . . .	"	...	...	I	...
	Alexander Russell, . . . .	"	...	...	I	...
	Patrick H. Aitken,	"	II	...	...	...
	Alexander Anderson,	"	II	...	...	...
	Robert T. Loudon,	"	...	II	...	...
	Robert Veitch,	England,	...	II	...	...
	James Maclay,	Scotland,	...	...	II	...
	John Stuart, . . . .	"	...	...	II	...
	James Hamilton, . . . .	"	...	...	II	...

			Class of Honours and Department.			
			Classics.	Mental Philos.	Math. & Nat. Phil.	Natural Science
1882	James A. M'Callum,	Scotland,	...	I	...	...
"	John H. Fullarton,	"	...	...	...	I
"	Charles P. Blair,	"	...	II	...	...
"	James M. Dodds,	"	I	...	...	...
"	John S. MacKenzie,	"	...	I	...	...
"	William Smart,	"	...	I	...	...
"	John Weir,	"	...	...	I	...
"	John Gray,	"	...	II	...	...
"	Charles Steele,	"	...	II	...	...
1883	John Aitken Orr,	"	...	I	...	...
"	Alexander Robinson,	"	...	II	...	...
"	Lewis Hughes,	Wales,	...	II	...	...
"	Francis Anderson,	Scotland,	...	I	...	...
"	Wm. S. M'Kechnie,	"	...	I	...	...
"	William Muir,	"	...	I	...	...
"	James W. Inglis,	"	II	...	...	...
"	Patrick H. Hutchinson,	Ireland,	II	...	...	...
"	Robert A. Moody,	Scotland,	II	...	...	...
"	William T. Mitchell,	"	...	...	II	...
1884	Andrew A. Mitchell,	"	I	...	...	...
"	James M'Millan,	"	I	...	...	...
"	Archd. S. Laidlaw,	"	...	I	...	...
"	John Mack,	"	...	...	I	...
"	William Clark,	"	II	...	...	...
"	John Struthers,	"	II	I	...	...
"	Archibald M'Laren,	"	I	...	...	...
"	John Adams,	"	...	I	...	...
"	James Barr,	"	...	I	...	...
"	Gavin Lambie,	"	...	I	...	...
"	Robert M. Wenley,	"	...	I	...	...
"	George G. Henderso	"	...	...	...	I
"	Campbell N. Moody,	"	II	II	...	...
"	Hugh Stevenson,	"	...	II	...	...
"	James Strachan,	"	...	...	II	...
"	Alex. B. Symington,	"	II	...	...	...
1885	John Lee,	"	I	...	...	...
"	James Buchanan,	"	...	...	I	...
"	Norman Fraser,	"	...	...	I	...
"	James P. M'Laren,	"	II	...	...	...
"	William Binnie,	"	...	II	...	...
"	David Frew,	"	...	II	...	...
"	Richard Glaister,	"	...	II	...	...
"	David Houston,	"	...	II	...	...
"	Walter Wingate,	"	...	...	II	...
"	William M. Mackay,	"	...	I	...	...
"	Andrew F. Smith,	"	...	I	...	...
"	Alex. L. Watson,	"	II	...	...	...
"	Archibald J. Macnicol,	"	...	...	II	...
1886	Charles F. Fleming,	England,	...	I	...	...
"	Wellstood A. Watt,	Scotland,	...	I	...	...
"	John Dougall,	"	...	...	I	...

			Class of Honours and Department.			
			Classics.	Mental Philos.	Math. & Nat. Phil.	Natural Science.
1886	John M'Cowan, B.Sc.,	Scotland,	...	...	I	...
"	William H. Carslaw,	"	...	...	II	...
"	Magnus M'Lean,	"	...	...	II	...
"	John A. Cramb,	"	I	...	...	...
"	Robert A. Duff,	"	...	I	...	...
"	William Johnston,	"	...	II	...	...
"	James Macmillan,	"	...	...	II	...
"	Robert A. Nicolson,	"	...	...	II	...
1887	James Finlayson,	"	...	...	II	...
"	James Gifford,	"	...	II	...	...
"	Charles Mackay Gordon,	W. Indies,	...	I	...	...
"	David Smith,	Scotland,	I	...	...	...
"	John Watson Bryson,	"	...	I	...	...
"	Robert Gardner,	"	...	II	...	...
"	James Giltfillan,	"	...	I	...	...
"	Daniel Kirkwood,	"	...	II	...	...
"	Alexander Lucas Taylor,	"	II	...	...	...
"	John Thomson,	"	...	...	II	...
1888	John Esslemont Adams,	"	II	...	...	...
"	Archibald Lamont,	"	...	II	...	...
"	Arthur David Millar,	"	I	...	...	...
"	John Dickson Sinclair,	"	...	II	...	...
"	Evan Keri Evans,	Wales,	...	I	...	...
"	Robert Kennedy, B.Sc.,	Scotland,	...	...	...	I
"	John Liddle King,	"	...	II	...	...
"	Malcolm Macnicol,	"	...	...	II	...
"	Ernest Findlay Scott,	England,	I	I	...	...
"	Robert Scrymgeour,	Scotland,	...	I	...	...
"	Robert Reid Strachan,	"	...	II	...	...
"	John Cunningham Walker,	"	...	II	...	...
1889	Norman de Garis Davies,	England,	...	II	...	...
"	George Davidson Kempt,	Scotland,	...	II	...	...
"	Alfred Ernest Garvie,	Poland,	...	I	...	...
"	John Hunter Harley,	Scotland,	...	I	...	...
"	John Brownlee,	"	...	...	I	...
1890	James Fairlie Gemmill,	"	I	...	...	...
"	John Edgar M'Fadyen,	"	I	...	...	...
"	James Robertson Cameron,	"	...	I	...	...
"	James Moffatt,	"	II	...	...	...
"	James Peter Wilson,	"	II	...	...	...
"	John Easton Black,	"	...	II	...	...
"	George Douglas Brown,	"	I	...	...	...
"	Robert Bulloch Douglas,	"	...	I	...	...
"	Peter Pinkerton,	"	...	...	I	...
"	Douglas Blyth Binning,	"	...	II	...	...
"	Robert Baillie Douglas,	"	...	II	...	...
"	James Hair Maclean,	"	...	II	...	...
"	Gilbert Buchanan,	"	...	...	II	...
"	Alexander Holm,	"	...	...	II	...
1891	John Hamilton Pagan	"	I	...	...	...
"	John Gillies,	"	II	...	...	...

			<i>Class of Honours and Department.</i>			
			Classics.	Mental Philos.	Math. & Nat. Phil.	Natural Science.
1891	John M'Gilchrist,	Scotland,	II	...	...	...
"	Horatio Scott Carslaw, . . . .	"	...	...	I	...
"	James Holm, . . . .	"	...	...	I	...
"	Nicol Macnicol,	"	II	II	...	...
"	John White,	"	...	II	...	...
1892	David Donaldson Robertson,	"	...	I	...	...
"	Daniel Lamont,	"	...	II	I	...
"	John Gillespie Spens,	"	II	...	...	...
"	Alexander Taylor,	"	II	...	...	...
"	Walter Stewart, . . . .	"	...	...	I	...
1893	Donald Nicol Dow,	"	I	...	...	...
"	Gilchrist Gibb Alexander,	"	...	I	...	...
"	Robert Stevenson Horne,	"	...	I	...	...
"	William Sandilands Templeton, . . . .	"	...	...	I	...
"	Wm. Carrick Anderson, . . . .	"	...	...	...	I
"	Edward H. Wallace,	"	II	...	II	...
1894	Campbell M. Maccleroy,	"	I	...	...	...
"	Robert George Nisbet,	"	II	...	...	...
"	Andrew Robertson,	"	II	...	...	...
"	John Charles Scott,	Ireland,	I	...	...	...
"	Charles William Thomson,	Scotland,	I	...	...	...
"	William Romaine Paterson,	"	...	I	...	...
"	Charles Shirra Dougall, . . . .	"	...	...	I	...
"	William Craig Henderson, . . . .	"	...	...	I	...
"	John Macfarlane Forsyth,	"	II	...	...	...
1895	William Gow,	"	I	...	...	...
"	Joseph Ferguson M'Fadyen,	"	I	...	...	...
"	Gavin Lang Pagan,	"	...	I	...	...
"	William Anderson Lindsay, . . . .	"	...	...	I	...
"	Thomas Nisbet, . . . .	"	...	...	I	...
"	John Alexander Duke,	"	...	II	...	...
1896	David Hodge Crawford,	"	I	...	...	...
"	John Freeland Cunningham,	"	II	...	...	...
"	John Girvan,	"	II	...	...	...
"	James M'Murtrie,	"	II	...	...	...
"	James Slater Dunlop, . . . .	"	...	...	II	...
"	William Morrison,	"	...	IV	...	...
"	Samuel Harvey M'Ewing,	"	...	II	...	...
"	Alexander Smith,	"	...	II	...	...
"	John Miller, . . . .	"	...	...	I	...
1898	William John Saull,	England,	...	II	...	...
1899	James Moffat,	Scotland,	...	...	II	...

MASTERS OF ARTS (M.A.).

Ordinances No. 11, Sections xi.-xv.; No. 44, Sections vi., viii.; No. 148, Sections ii., iii.;
No. 160, Sections i.-iii.; No. 168, Section i. (1889).

		First Class.	Second Class.	Third Class.
1894	Henry Noel Brailsford, England,	Mental Philosophy.	Classics.	
1895	William Gregory Bell, do.,	Classics.		
"	James Wallace Peck, Scotland,	Math. & Nat. Phil.		
"	William King Gillies, do.,	{ Classics.		
1896	James Paterson Brander, do.,	{ Mental Philosophy.		
"	John Maclean Ramsay, do.,	Classics.		
"	Horace Fenton Wallace, do.,	Classics.		
"	James Gillespie, do.,		Classics.	
"	William Boyd, do.,	Mental Philosophy.		
"	James Wilson Copeland, do.,	Math. & Nat. Phil.		
"	Adam Bell Stewart, do.,	Math. & Nat. Phil.		
"	George Donald Valentine, do.,	Math. & Nat. Phil.		
"	Arthur West Wilkie, England,	. . . . .	Math. & N.P.	
"	John Young, Scotland,	. . . . .	Math. & N.P.	
1897	George Stewart Adams, do.,	Classics.		
"	Robert Daniels Bell, England,	Classics.		
"	John W. Henderson, Scotland,	Classics.		
"	Peter William Monie, do.,	Classics.		
"	Marion M. Crichton, China,	. . . . .	Classics.	
"	Alex. James Martin, Scotland,	. . . . .	Classics.	
"	Thomas Neilson, do.,	. . . . .	Classics.	
"	Allan Gibson, do.,	. . . . .		Classics.
"	Thomas Ellis Jones, Wales,	Mental Philosophy.		
"	David Stevenson, Scotland,	. . . . .		English.
"	William M. R. Pringle, "	History.	Classics.	
"	Gavin Scott, "	History.	Classics.	
"	Adam Hamilton, "	Classics.		
"	James William Baird, "	. . . . .	Classics.	
"	Grace Foulis Hay, "	. . . . .	Classics.	
"	William N. Raeburn, "	. . . . .	Classics.	
"	Andrew Boyd Scott, "	Mental Philosophy.		
"	John Scoular Thomson, "	Mental Philosophy.		
"	Alex. M'Callum Scott, "	. . . . .	. . . . .	{ Ment. Phil.
"	James Campbell Ker, "	Math. & Nat. Phil.		
"	William Wylie Fulton, "	. . . . .	English.	
"	Richard R. Williams, Wales,	. . . . .	. . . . .	English.
1898	John Lyle Morison, Scotland,	{ History.		
"	William H. Begg, do.,	{ English.		
"	David L. Blair, do.,	Classics.		
"	John Harvey, do.,	Classics.		
"	Dorothy N. T. Murray, do.,	. . . . .	Classics.	
"	Constance Tannahill, England,	. . . . .	. . . . .	Classics.
"	Alexander A. Gardner, Scotland,	Math. & Nat. Phil.		
"	James E. Henderson, "	. . . . .	Math. & N.P.	
"	Wm. Fulton (Uddingston), "	Classics.	Math. & N.P.	

		First Class.	Second Class.	Third Class.
1898	Eliz. Pettigrew Taylor, Scotland,	Math. & Nat. Phil.	English.	Classics, M. Phil.
"	William Longmore Parkin, "	Classics.	"	
"	Robert M'Ewan, "	Classics.	"	Classics.
"	Helen Rutherford, "	Classics.	"	
"	William Fulton (Glasgow), "	"	Classics.	Classics.
"	William Henderson Love, "	"	Classics.	
"	Alexander Auchinachie, "	"	"	Classics.
"	And. James Campbell Kerr, "	"	"	
"	Hugh Reid Buchanan, "	Mental Philosophy.	"	Classics.
"	David H. Tweeddale, "	Mental Philosophy.	"	
"	Robert Candlish, "	"	Ment. Phil.	Classics.
"	Robert John Tainsh Bell, "	Math. & Nat. Phil.	"	
"	Thomas Pullar, . . . "	Math. & Nat. Phil.	"	Classics.
"	Joseph White, . . . "	Math. & Nat. Phil.	"	
"	Hugh Brown, . . . "	"	Math. & N.P.	M. & N.P.
"	Peter Lowson, . . . "	"	Math. & N.P.	
"	John Jeffrey, . . . "	"	"	English.
"	Helen Margaret Rule, "	English.	"	
"	Henry Murphy, . . . "	"	"	English.
"	Henry Givan Webber, "	"	"	
1899	Samuel F. H. Mackay	Classics.	"	Classics.
"	Archibald Main, "	Mental Philosophy.	"	
"	John Edgar, . . . "	English.	"	M. Lang
"	Maude Gertrude May, England,	English.	"	
"	Alexander D. Lindsay, Scotland,	"	Classics.	Classics.
"	Charles G. M'Ilravey, Ireland,	"	Classics.	
"	Gordon B. Nielson, Scotland,	"	English.	Mod. Lang.
"	Jessie Lyon Gilchrist, "	"	Mod. Lang.	
"	Minnie Louise Arthur, "	"	"	Classics
"	David M. Stewart, . . . "	Math. & Nat. Phil.	"	
"	John Lochhead, . . . "	English.	History.	Classics
"	Ritchie Girvan, . . . "	English.	"	
"	John Anderson, . . . "	"	Classics, Math. & N.P.	Classics.
"	William A. Edward, . England,	Classics.	"	
"	James Sheridan, . . . Scotland,	Classics.	"	Classics.
"	James M'Clelland, . . . "	"	Classics.	
"	James Faulds, . . . "	"	"	Math. & N.P.
"	Arch. M. Macmillan, B.Sc., "	Math. & Nat. Phil.	"	
"	David K. Picken, . . . "	Math. & Nat. Phil.	"	Classics.
"	Robert W. Stewart, . . . "	"	Math. & N.P.	
"	Katharine T. M'Millan, "	English.	"	Classics.
"	George Ogilvie, . . . "	English.	"	
"	Janet Spens, . . . "	English.	"	Classics.
1900	Mabel Atkinson, . . . England,	Mental Philosophy.	Classics.	
"	George H. Stevenson, Scotland,	Classics.	"	Math. & N.P.
"	Robert B. Carslaw, . . . "	Math. & Nat. Phil.	"	
"	Peter Ramsay, . . . "	Math. & Nat. Phil.	"	Classics.
"	James Jack, . . . "	"	Classics.	
"	Norman R. Mitchell, . . . "	"	Classics.	Ment. Phil.
"	Matthew Babington, . . . "	"	Ment. Phil.	
"	Peter Lowe, B.Sc., . . . "	"	Math. & N.P.	

			First Class.	Second Class.	Third Class.
1900	Winifred Boyd, . . . India,		. . . . .	English.	
"	Margaret G. Fulton, . . Scotland,		. . . . .	Mod. Lang.	
"	James Johnston, . . . do.,	Mental Philosophy.			
"	Alex. B. Mackay, . . . do.,	Mental Philosophy.			
"	Alexander Montgomerie, do.,	Mental Philosophy.		¹ History.	
"	David G. Taylor, . . . do.,	Math. and Nat. Phil.			
"	Margaret L. Anderson, do.,	² Classics.			
"	Peter George Smith, . . do.,	English.			
"	Peter George Smith, . . do.,	. . . . .		Ment. Phil.	
"	John Charles Mann, . . England,	. . . . .		Math. & N. P.	
"	Roderick M. Nicol, . . Scotland,	. . . . .		Math. & N. P.	
"	James Miller Clark, . . do.,	. . . . .			M. & N. P.
1901	James F. Dyer, . . . Japan,	Classics.			
"	Peter Hatley Waddell, Singapore,	¹ Economic Science.			
"	Francis P. H. Stirling, Scotland,	Classics.			
"	Hugh Watt, . . . do.,	Math. and Nat. Phil.			
"	Marion K. Binnie, . . do.,	English.			
"	William H. Buchan, . . do.,	Modern Languages.			
"	Owen L. Jones, . . . Wales,	. . . . .		Classics.	
"	Thomas R. M'Murtrie, Scotland,	. . . . .		Classics.	
"	Alexander Russell, . . do.,	. . . . .		Classics.	
"	Andrew M'Kerral, . . do.,	. . . . .		Math. & N. P.	
"	Arthur S. Hutchison, do.,	. . . . .			Classics.
"	³ Thomas Jones, . . . do.,	Economic Science.			
"	Dougald B. M'Quistan, do.,	Math. and Nat. Phil.		Classics.	
"	Steuart N. Miller, . . do.,	Classics.			
"	Charles A. Young, . . do.,	English.			
"	Stanley H. Turner, . . England,	Economic Science.			
"	John J. Gemmell, . . Scotland,	. . . . .		Classics.	
"	Thomas Graham, . . . do.,	. . . . .		Classics.	
"	Jas. G. MacDonald, Br. Cen. Africa,	. . . . .		Classics.	
"	James Moyes, . . . Scotland,	. . . . .		Classics.	
"	William R. Wiseman, do.,	. . . . .		Ment. Phil.	
"	James N. Stirling, . . do.,	. . . . .		Math. & N. P.	
"	Catherine Bennie, . . do.,	. . . . .		Mod. Lang.	
"	James H. Steel, . . . do.,	. . . . .		Econ. Sc.	
1902	Margaret A. Scott, . . do.,	Modern Languages.			
"	James M'Nabb, . . . do.,	. . . . .		Math. & N. P.	
"	Helen M. Armour, . . do.,	. . . . .		English.	
"	Alexander Mackinnon, do.,	. . . . .		English.	
"	Edith M. Lindsay, . . do.,	. . . . .		History.	
"	⁴ Frederick Mort, . . . do.,	. . . . .			M. & N. P.
"	⁴ John Patterson, . . do.,	English.			
"	⁵ Christian Pettigrew Home } do.,	. . . . .		Mod. Lang.	
"	Morton, . . . } do.,	. . . . .		
"	⁵ Malcolm MacAlister, . . do.,	. . . . .		English.	
"	⁵ John Macdonald Richardson, do.,	. . . . .			Ec. Sc.

¹ Postgraduate Honours in Oct., 1901.² Postgraduate Honours in April, 1901.³ Took the Ordinary Degree in Nov., 1900.⁴ Took the Ordinary Degree in April, 1900.⁵ Took the Ordinary Degree in April, 1901.

		First Class.	Second Class.	Third Class.
1902	Wm. Lindsay Thompson, Scotland,	Math. and Nat. Phil.	Classics.	
"	William Holms Coats, . do.,	Classics.		
"	Robert Kerr Goodfellow, . do.,	Classics.		
"	John MacInnes, . . do.,	Classics.		
"	Eric James Roberts, . England,	Mental Philosophy.		
"	Robert Alex. Houstoun, Scotland,	Math. and Nat. Phil.		
"	Mary Clow Cameron, . do.,	Modern Languages.		
"	George Stewart, . do.,	History.		
"	George Douglas Reith, . do.,	. . . . .	Classics.	
"	Archie Duncan Thomson, do.,	. . . . .	Mental Phil.	Classics.
"	Oliver Dryer, . . do.,	. . . . .	Classics.	
"	John Gordon, . . do.,	. . . . .	Classics.	
"	John Orr, . . . do.,	. . . . .	Classics.	
"	Frank William Saunders, do.,	. . . . .	Classics.	
"	Margaret Hay Livingston, do.,	. . . . .	Math. & N. P.	
"	John Henderson Stewart, do.,	. . . . .	Math. & N. P.	
"	Maggie Chalmers, . do.,	. . . . .	Mod. Lang.	
"	Robert Millar, . . do.,	. . . . .		M. & N. P.
"	Peter MacMillan, . do.,	. . . . .		History.
1903	George Stuart Gordon, . do.,	Classics.		
"	Archibald Lang, . do.,	Math. and Nat. Phil.		
"	James Hamilton Lindsay, do.,	Math. and Nat. Phil.		
"	John Reid Cameron, . do.,	English.		
"	Mary Emilie Thomson, . do.,	Modern Languages.		
"	George Beaumont, . England,	. . . . .	Classics.	
"	Jas. Aitchison Milligan, Scotland,	. . . . .	Classics.	
"	Matthew Stewart, . do.,	. . . . .	Classics.	
"	Harold Wilson, . . do.,	. . . . .	Classics.	
"	¹ Alexander Borland, . do.,	. . . . .	Mental Phil.	
"	Muriel Giffen Lindsay, do.,	. . . . .	Math. & N. P.	
"	William M'Naught, . do.,	. . . . .	Math. & N. P.	
"	¹ John Laing Kinloch, . do.,	. . . . .	English.	
"	Charles M'gee Wright, Ireland,	. . . . .		Classics.
"	James Campbell Moir, Scotland,	. . . . .		M. & N. P.
"	Wm. Scott Branks Wilson, do.,	. . . . .		M. & N. P.
"	William Sutherland, . do.,	Math. and Nat. Phil.	History.	
"	Robert R. Rusk, . . do.,	Mental Philosophy.		
"	John W. Scott, . . do.,	Mental Philosophy.		
"	² William A. Campsie, . do.,	Math. and Nat. Phil.		
"	Samuel N. Forrest, . . do.,	Math. and Nat. Phil.		
"	Robert Hamilton, . . do.,	Math. and Nat. Phil.		
"	Robert Jack, . . . do.,	Math. and Nat. Phil.		
"	William Miller, . . do.,	Math. and Nat. Phil.		
"	Mary C. Biggar, . . do.,	Modern Languages.		
"	Janet Green, . . South Africa,	Modern Languages.		
"	Alice M. B. Guthrie, Scotland,	Modern Languages.		
"	Robert W. Barr, . . do.,	. . . . .	Classics.	
"	Peter Marshall, . . do.,	. . . . .	Classics.	
"	Alexander Moffat, . . do.,	. . . . .	Classics.	
"	James H. Stevenson, Canada,	. . . . .	Classics.	
"	Robert M. Morison, . Scotland,	. . . . .	Math. & N. P.	

¹ Took the Ordinary Degree in April, 1901.² Took the Ordinary Degree in April, 1902.

			First Class.	Second Class.	Third Class.
1903	¹ Daniel Gillies, . . . Scotland,			English.	
"	Mary Barrowman, . . . do.,			Mod. Lang.	
"	Robert Cunningham, . . do.,				Classics.
"	Harry J. Phillips, . . . do.,				Classics.
"	² James Hunter, . . . do.,				M.&N.P.
"	³ Peter M'Dougall, . . . do.,				English.
1904	James M. Devine, . . . do.,	Classics.			
"	William Manson, . . . do.,	Classics.			
"	Charles G. Nelson, . . . do.,	Classics.			
"	Annie Jane Arnott, . . . do.,	Modern Languages.			
"	Elizabeth W. Scott, . . . do.,	Modern Languages.			
"	William J. Auld, . . . do.,		Classics.		
"	Adam Patrick, . . . do.,		Classics.		
"	Arthur Shepherd, . . . do.,		Classics.		
"	² John Hutcheson, . . . do.,		English.		
"	Arthur Craig, . . . England,		Mod. Lang.		
"	James P. Mackay, . . . Scotland,				M.&N.P.
"	Robert Burns (Larkhall), . do.,	History.			M.&N.P.
"	Alexander Pender Crichton, do.,	Mental Philosophy.			
"	Robert Nicol Cross, . . . do.,	Mental Philosophy.			
"	Robert Alex. Cameron } do.,	Mental Philosophy.			
"	Macmillan, . . . }				
"	Harold Charles Rowse, England,	Mental Philosophy.			
"	George Green, . . . Scotland,	Math. and Nat. Phil.			
"	John Miller (Beith), . . . do.,	Math. and Nat. Phil.			
"	John Ferguson Tinto, . . . do.,	Math. and Nat. Phil.			
"	James Robertson Buchanan, do.,	Semitic Languages.			
"	Robert Dewar, . . . England,	English.			
"	Theodore Douglas Dunn, Scotland,	English.			
"	Ida Macgregor Gordon, . . do.,	Modern Languages.			
"	Annie Glenday Philip, . . do.,	Modern Languages.			
"	⁴ Margaret T. Robertson, . do.,	History.			
"	Donald Carswell, . . . do.,		Classics.		English.
"	William Tod Ritchie, . . do.,		History.		Classics.
"	John M'Bryde, . . . do.,		Classics.		
"	John MacLean (Wishaw), . do.,		Classics.		
"	William Paterson, . . . do.,		Ment. Phil.		
"	Robert Browning, . . . do.,		Math.&N.P.		
"	David Auchinvole Dick, . . do.,		Math.&N.P.		
"	Robert Harvie, . . . do.,		Math.&N.P.		
"	Thomas David King Murray, do.,		Math.&N.P.		
"	David Bryan, . . . do.,		English.		
"	James Hutchison Cockburn, do.,		English.		
"	William MacDougall, . . do.,		English.		
"	Alice Annie Lumsden } do.,		English.		
"	Malcolm, . . . }				
"	Isabella Wilson, . . . do.,		Mod. Lang.		
"	¹ Andrew Henderson, . . . do.,		Math.&N.P.		
"	Jane Helen Ross, . . . do.,				M.&N.P.
"	Margarette C. Paterson, . do.,				English.

¹Took the Ordinary Degree in April, 1901.³Took the Ordinary Degree in April, 1900.²Took the Ordinary Degree in April, 1903.⁴Took the Ordinary Degree in April, 1902

		First Class.	Second Class.	Third Class.
1904	Douglas H. Wilson, . Scotland,			History.
1905	John Rankine Brown, . do.,	Classics.		
"	Charles Geo. G. Helme, . do.,	Classics.		
"	Walter M. MacCulloch, . do.,	Classics.		
"	William Salmond Stewart, do.,	Classics.		
"	Janet Isabel Macphail, . do.,	Modern Languages.		
"	Flora Ritchie, . . . do.,	Modern Languages.		
"	James Edward Scott, . do.,		Classics.	
"	James Mathie Barclay, . do.,		History.	
"	John Jarvie Dempster, . do.,		Classics.	
"	Robert Hellier Napier, . do.,		Classics.	
"	Charles Eadie Park White, do.,		Classics.	
"	James Mair Frew, . . . do.,		Math. & N.P.	
"	Andrew Hutchison, . . do.,		Math. & N.P.	
"	James Adam M'Harg, . . do.,		Math. & N.P.	
"	Christian Ewen, . . . do.,		English.	
"	¹ William Ferguson, . . do.,		English.	
"	Clarence James Vincent, . do.,			Classics.
"	Wm. Isaac Hutcheon Marr, do.,			History.
"	² Andrew C. Baird, . . . do.,			M.&N.P.
"	Kenneth Stewart, . . . do.,		Classics.	M.&N.P.
"	James Carrick Miller Fairlie, do.,	Classics.		
"	Constance Helen . . . } India.	Semitic Languages.		
"	Margaret Archibald, } .	Modern Languages.		
"	⁴ Albert Frederick . . . } England,	Economic Science.		
"	Lucas Brayne, . . . } .	Classics.		
"	Archibald A. Bowman, Scotland,	Mental Philosophy.	Classics.	
"	Neil M'Arthur, . . . do.,	Math. and Nat. Phil.		
"	Thomas Murray MacRobert, do.,	Math. and Nat. Phil.		
"	Leonard James Russell, England,	Math. and Nat. Phil.		
"	George Duncan, . . . } British	Math. and Nat. Phil.		
"	Campbell Stokes, . . . } Guiana,			
"	Isabel Margaret Milligan, Scotland,	English.		
"	Annie Murray Macgregor, do.,	Modern Languages.		
"	William Buchan Donald, . do.,		Classics.	
"	Mary Scott Mackenzie, . do.,		Math. & N.P.	
"	Tennant Sloan, . . . do.,		Classics.	
"	Henry Martyn Trafford, England,		Classics.	
"	Donald Macphie, . . . do.,		Ment. Phil.	
"	John Purdie, . . . do.,		Math. & N.P.	
"	Richard Murray, . . . do.,		Math. & N.P.	
"	Dugald Ferguson Percy, . do.,		English.	
"	¹ David Brown Mungo, . . do.,		English.	
"	³ George Frank Clark, . . do.,		History.	
1906	Gilbert Pitcairn Hogg, . do.,	Economic Science.		English.
"	Janey Aitken Keddie, . do.,	Modern Languages.	Math. & N.P.	

¹ Took the Ordinary Degree in April, 1902.² Took the Ordinary Degree in April, 1904.³ Took the Ordinary Degree in April, 1903.⁴ Took the Ordinary Degree in April, 1905.

		First Class.	Second Class.	Third Class.
1906	Mary M. Waddington, England,	Modern Languages.		
"	Thomas Logan Douglas, . do.,	. . . . .	Classics.	English.
"	Oswald James Gardner, . do.,	. . . . .	Classics.	
"	Alexander Colquhoun Grant, do.,	. . . . .	Classics.	
"	Elton Lawrence Gueritz, . do.,	. . . . .	Classics.	
"	Elias Henry Jones, Wales,	. . . . .	Classics.	
"	John M'Phee, Scotland,	. . . . .	Classics.	
"	Euphemia W. Sutherland, do.,	. . . . .	Classics.	
"	James M'Arthur, do.,	. . . . .	English.	
"	Elizabeth Alexander Forrest, do.,	. . . . .	Mod. Lang.	
"	William Angus Munro, . . do.,	. . . . .	Mod. Lang.	
"	Annie Stewart Robertson, do.,	. . . . .	Mod. Lang.	
"	Joan Dorothea Hughes, England,	. . . . .		English.

¹ Took the Ordinary Degree in April, 1903.

BACHELORS OF SCIENCE (B.Sc.).

(O.R.)

		<i>Honours.</i>	
		Natural Science.	Engineering Science.
1879	Robert F. Muirhead, C.E., Scotland,	. . . . .	Math. & Nat. Phil. II
1882	John Cleland, C.E., . . . do.,	. . . . .	Math. & Nat. Phil. II
1883	John M'Cowen, C.E., . . . do.,	. . . . .	Math. & Nat. Phil. II
1884	William Weir, do.,	. . . . .	Math. & Nat. Phil. II
"	James C. Todd, India,	Math. & Nat. Phil. II	
1886	Lawrence Crawford, . . . Scotland,	. . . . .	Math. & Nat. Phil. I
1887	Angus M'Lean, do.,	. . . . .	Math. & Nat. Phil. II
1890	James Stanley Muir, . . . do.,	Chemistry.	
"	Robert Watson Smith, . . do.,	Chemistry.	
1891	James Fenwick, Australia,	. . . . .	Civil Engineering.
"	Robert Main, Scotland,	Chemistry.	
"	Robert Muir Ferrier, . . do.,	. . . . .	Civil Engineering.
1892	John Dewar Cormack, . . . do.,	. . . . .	Math. & Nat. Phil. I
"	Jas. Blacklock Henderson, do.,	. . . . .	Math. & Nat. Phil. I
"	James Rankin, do.,	. . . . .	Civil Engineering.
"	William S. Cook, do.,	Zoology and Botany.	
"	David R. Boyd, do.,	Physiology.	
1893	James C. Robertson, M.A., do.,	Chemistry.	
1894	Charles Forbes, do.,	Anat. and Physiol.	
"	Wm. Henry Lang, England,	. . . . .	Civil Engineering.
"	George Wm. Shearer, . . . Ireland,	Botany and Zoology.	
1895	Wm. Craig Henderson, . Scotland,	. . . . .	Civil Engineering.
"	Hugh Calderwood, do.,	Math. & Nat. Phil. I	
"	John Allan Craigie Macewen, do.,	Anat. and Physiol.	
"	William Hamilton, do.,	. . . . .	Civil Engineering.
"	Campbell Macmillan, . . do.,	. . . . .	Civil Engineering.
"	Thomas Hunter, M.A., . . do.,	. . . . .
"	William Martin, M.A., . . do.,	Anat. and Physiol.	
1896	William S. Templeton, M.A., do.,	. . . . .	Math. & Nat. Phil. I
"	Peter L. L. Craig, M.A., . . do.,	Anat. and Physiol.	

BACHELORS OF SCIENCE (PURE SCIENCE).

Ordinance No. 12, Section ix. (1889).

		<i>Subjects of Final Examination.</i>			
1898	John Pinkerton Duncan, . . .	Anatomy.	Physiology.	Zoology.	
„	Ruth Pirret, . . .	Mathematics.	Chemistry.	Physiology.	
„	Daisy Annabella Murdoch Clark, . . .	Physiology.	Zoology.	Botany.	
„	William Anderson Lindsay, M.A., . . .	Mathematics.	Nat. Phil.	*Astronomy.	
„	Allan Martin, M.A., . . .	Anatomy.	Physiology.	Zoology.	
1899	Robert John Tainsh Bell, M.A., . . .	*Mathematics.	*Nat. Phil.	*Astronomy.	
„	Robert Macfarlane Clark, . . .	*Mathematics.	*Nat. Phil.	Chemistry.	
„	William Anderson, . . .	*Mathematics.	*Nat. Phil.	*Astronomy.	
„	James Slater Dunlop, M.A., . . .	Mathematics.	Nat. Phil.	Astronomy.	
„	Robert William Stewart, . . .	*Mathematics.	*Nat. Phil.	Chemistry.	
„	Robert George White, M.A., . . .	Anatomy.	Physiology.	Zoology.	
1900	Gertrude Dorman Bostock, . . .	Anatomy.	Physiology.	Zoology.	
„	Kate Fraser, . . .	Anatomy.	*Physiology.	Zoology.	
„	William Fulton, M.A., . . .	*Mathematics.	Nat. Phil.	*Astronomy.	
„	William Boyd, M.A., . . .	Chemistry.	Geology.	Zoology.	
„	Joseph White, M.A., . . .	*Mathematics.	*Nat. Phil.	Anatomy.	Physiology.
1901	James Miller Clark, M.A., . . .	Mathematics.	Nat. Phil.	*Astronomy.	
„	James Alex. Russell Henderson, . . .	Mathematics.	Chemistry.	Geology.	
„	Ivy M'Kenzie, M.A., . . .	Anatomy.	Physiology.	Zoology.	
„	Alexander Matheson, M.A., . . .	Anatomy.	Physiology.	Zoology.	
„	Alexander Wood, . . .	Mathematics.	Nat. Phil.	*Astronomy.	
„	Robert Donald, . . .	Chemistry.	Geology.	Zoology.	
„	Malcolm Hutton, M.A., . . .	Anatomy.	Physiology.	Zoology.	
„	William Hyslop, M.A., . . .	*Mathematics.	*Nat. Phil.	Geology.	
„	Jane Hamilton M'Iroy, M.A., . . .	Physiology.	Zoology.	Botany.	
„	John Muir, . . .	Anatomy.	Physiology.	Geology.	
1902	Frederick Mort, M.A., . . .	Mathematics.	Nat. Phil.	Geology.	
„	George Goldie Smith, . . .	Anatomy.	Physiology.	Zoology.	
„	Alfred Walter Stewart, . . .	Mathematics.	Chemistry.	Geology.	
„	David James M'Leish, M.A., . . .	Anatomy.	Physiology.	Zoology.	
„	Berkeley Hope Robertson, M.A., . . .	Physiology.	Geology.	Zoology.	
1903	John Graham, . . .	Chemistry.	Anatomy.	Physiology.	
„	Robert Irvine, M.A., . . .	Mathematics.	Astronomy.	Geology.	
„	Jessie Deans Rankin, M.A., . . .	Anatomy.	*Physiology.	Zoology.	
„	Wm. Lindsay Thompson, M.A., . . .	*Mathematics.	*Nat. Phil.	Geology.	
„	Thomas Barbour, . . .	Mathematics.	Nat. Phil.	Physiology.	
„	Robert A. Houston, M.A., . . .	*Mathematics.	*Nat. Phil.	*Astronomy.	
„	Thomas M'Crick, M.A., . . .	Geology.	*Zoology.	Botany.	
„	Dougald B. M'Quistan, M.A., . . .	*Mathematics.	*Nat. Phil.	*Astronomy.	
„	John H. Stewart, M.A., . . .	Mathematics.	Nat. Phil.	*Astronomy.	
1904	John Anderson, M.A., . . .	Physiology.	Geology.	Zoology.	
„	John Campbell, . . .	Mathematics.	Nat. Phil.	Chemistry.	
„	Samuel N. Forrest, M.A., . . .	*Mathematics.	*Nat. Phil.	Chemistry.	
„	Sampachi Fukuzawa, . . .	Mathematics.	Nat. Phil.	Chemistry.	
„	Louis Niel Gow, M.A., . . .	Mathematics.	Nat. Phil.	Chemistry.	
„	John Isdale Greig, M.A., . . .	Anatomy.	Physiology.	Botany.	
„	James Hunter, M.A., . . .	Mathematics.	Nat. Phil.	Astronomy.	
„	Harry S. Hutchison, . . .	Chemistry.	Anatomy.	Physiology.	

* The asterisks indicate Special Distinction in the subjects to which they are prefixed.

		<i>Subjects of Final Examinations.</i>		
1904	Margaret Barbour, M.A.,	*Physiology.	Geology.	Botany.
"	David Stewart Brunton, M.A.,	Mathematics.	Chemistry.	Geology.
"	Archibald Lang, M.A.,	*Mathematics.	*Nat. Phil.	Astronomy.
"	William Miller, M.A.,	*Mathematics.	*Nat. Phil.	*Astronomy.
"	Peter Ramsay, M.A.,	*Mathematics.	*Nat. Phil.	Geology.
1905	David Arthur,	Anatomy.	*Physiology.	Zoology.
"	Andrew Cumming Baird, M.A.,	Mathematics.	Nat. Phil.	Geology.
"	¹ Alexander Graham,	Anatomy.	Geology.	Zoology.
"	Thomas Dingwall Mackenzie,	Chemistry.	Physiology.	Geology.
"	William Pettigrew M'Pherson,	Chemistry.	Physiology.	Geology.
"	Kathleen Mary Nolan,	*Physiology.	Zoology.	Botany.
"	William Richard Wiseman, M.A.,	Chemistry.	*Physiology.	Geology.
"	William Brown, M.A.,	Anatomy.	Physiology.	Zoology.
"	James Mair Frew, M.A.,	*Mathematics.	Nat. Phil.	Astronomy.
"	Thomas Murray MacRobert, M.A.,	*Mathematics.	*Nat. Phil.	Astronomy.
"	John Clark Middleton, M.A.,	Anatomy.	Physiology.	*Zoology.
"	James Moyes, M.A.,	Chemistry.	Geology.	Botany.
"	Thomas David King Murray, M.A.,	Mathematics.	Nat. Phil.	Astronomy.
"	Ralph Montgomery Fullarton Picken,	Anatomy.	Physiology.	*Zoology.
"	John Purdie, M.A.,	Mathematics.	Nat. Phil.	Astronomy.
"	Jane Helen Ross, M.A.,	Mathematics.	Nat. Phil.	Botany.
"	George Duncan Campbell Stokes, M.A.,	*Mathematics.	*Nat. Phil.	Chemistry.
1906	John Fotheringham,	Anatomy.	Physiology.	*Zoology.
"	Robert Hamilton, M.A.,	*Mathematics.	*Nat. Phil.	Astronomy.
"	Robert Jack, M.A.,	*Mathematics.	*Nat. Phil.	*Astronomy.
"	Neil McArthur, M.A.,	*Mathematics.	*Nat. Phil.	*Astronomy.
"	John Stewart, M.A.,	Anatomy.	Physiology.	Zoology.
"	David Thomson, M.A.,	Mathematics.	*Chemistry.	Geology.

¹ Graduated B.Sc. in Agriculture, 1902.

*The asterisks indicate Special Distinction in the subjects to which they are prefixed.

BACHELORS OF SCIENCE (ENGINEERING).

[Ordinance No. 23, Section xiii. (1889).

The *Italics* denote Graduates on the Naval Architecture side.

		<i>With Special Distinction in</i>
1895	<i>Daniel Chaplin Nutting.</i>	
"	Adam Gowans Whyte.	
1896	Oliver Styles.	
"	James Muir,	{ Engineering and Drawing.
"		{ Astronomy and Geodesy.
1897	John Frederick Black.	
"	James Henry Grieve.	
"	Peter Lowe.	
1898	Andrew Dunn.	
"	James Weir French.	
"	<i>James Paton.</i>	

		<i>With Special Distinction in</i>
1898	Owen Richard Williams.	
„	Archibald Morven Macmillan, . . .	{ Mathematics. Natural Philosophy. Engineering and Drawing.
„	Hugh Wallace,	{ Mathematics. Engineering and Drawing.
„	Hugh Munro.	
„	John Warrack.	
1899	James Malcolm Bell.	
„	Hjalmar Berg.	
„	Andrew Marshall Downie.	
„	John Gordon Henderson.	
„	Stephen Hutchison.	
„	James Rae M'Intosh.	
„	John Steel Nicholson.	
„	David Robertson,	{ Engineering and Drawing. Electricity—Pure and Applied.
1899	William Guthrie Strang,	{ Mathematics. Natural Philosophy. Engineering and Drawing. Geology and Mineralogy.
„	William Walker.	
„	William Renfrew Wilson.	
„	<i>Einar Bull.</i>	
„	<i>Charles Stuart Douglas.</i>	
„	George Alexander Inglis.	
„	William Henry Fullarton Murdoch.	
„	William Valentine Shearer.	
„	Archibald Craig Walker.	
1900	<i>John Hutchison Barbour.</i>	
„	Anthony Cathcart Coubrough, M.A.	
„	<i>Robert Morton Dyer.</i>	
„	<i>John Gavin Johnstone.</i>	
„	Charles Selby Lennox MacFarlane.	
„	<i>Hugh Millar MacMillan.</i>	
„	<i>James Vost.</i>	
„	Alexander Houston Weddell, . . .	{ Natural Philosophy. Engineering and Drawing. Electricity—Pure and Applied.
„	Archibald Leitch.	
„	John Nanscawen Dawe.	
„	James Aitchison.	
„	William Henry Ballantyne, . . .	Electricity—Pure and Applied.
1901	James Craig.	
„	John Francis Henderson.	
„	Carolus Marie.	
„	George Macmillan Young.	
„	William Bryson.	
„	Robert Thomson Neilson.	
„	James Neilson Stirling,	{ Mathematics. Natural Philosophy.
„	Andrew Hepburn Whitelaw.	
„	Alfred John Wilson,	{ Mathematics. Engineering and Drawing.

		<i>With Special Distinction in</i>
1902	William George Burn.	
"	¹ James Miller Clark, M.A.,	Astronomy and Geodesy.
"	John Fairley.	
"	John Clowes Fairlie.	
"	Thomas Macmillan Hunter, M.A., . .	Mathematics.
"	Duncan Robert MacLachlan,	Engineering Laboratory—Electrical.
"	Thomas Bonner Morley,	{ Mathematics.
"		{ Natural Philosophy.
"		{ Engineering and Drawing.
"	James Muirhead,	{ Engineering and Drawing.
"		{ Engineering Laboratory—Electrical.
"	James Valence Nimmo,	Natural Philosophy.
"	Alexander Williamson.	
"	Robert Ernest Workman,	Mathematics.
"	John Graham Young.	
"	<i>William M'Gill Gray.</i>	
"	William Barnett Harvey.	
"	William Campbell Houston,	{ Engineering and Drawing.
"		{ Electricity—Pure and Applied.
"	Niel Boyd Macmillan.	
"	John Findlay Muir.	
"	<i>William Frank Robertson.</i>	
"	Kouji Satow.	
"	Frederick Robert Stewart.	
1903	Hugh de Paynesley Birkett.	
"	William Henry Dorman Bostock.	
"	William Jackson Crawford.	
"	Thomas Grant Dempster.	
"	<i>James Black Dickie.</i>	
"	James Gordon Gray,	{ Mathematics.
"		{ Natural Philosophy.
"		{ Physical Laboratory.
"		{ Electricity—Pure and Applied.
"	Charles Henry Lobban.	
"	Hugh Alexander Mackay.	
"	Neil John Maclean,	{ Natural Philosophy.
"		{ Engineering and Drawing.
"		{ Electricity—Pure and Applied.
"		{ Engineering Laboratory—Electrical.
"	John Martin,	
"	Clive Macfarlane Primrose.	
"	Fryer Thomas Acheson Smyth.	
"	<i>James Edward Steele.</i>	
"	James Summers,	{ Physical Laboratory.
"		{ Engineering and Drawing.
"		{ Electricity—Pure and Applied.
"	John Younger,	Engineering Laboratory—Mechanical.
"	James Gray,	{ Natural Philosophy.
"		{ Physical Laboratory.
"		{ Electricity—Pure and Applied.
"	Robert Blair.	
"	Robert Crichton.	
"	Richard Frederick Hartley,	Engineering Laboratory—Mechanical.
"	William Carrick Howat.	

¹ Graduated B.Sc. in Pure Science, 1901.

With Special Distinction in

1903	James Howden.	
"	John Alexander M'Crindle.	
"	John Ernest MacDougall.	
"	<i>John Alexander Gowans Tainsh.</i>	
"	Henry Owen Weller.	
1904	Bernard Inman Franklin Adams,	Physical Laboratory.
"	Robert Douglas Archibald, . . .	{ Natural Philosophy.
"	Hubert Noel Beilby.	{ Engineering and Drawing.
"	Robert Bilsland,	Physical Laboratory.
"	<i>Ejnar Bondegaard,</i>	Physical Laboratory.
"	John Brown.	
"	James Richardson Coats.	
"	Henry James Morrison Cousens,	{ Mathematics.
"		{ Natural Philosophy.
"		{ Physical Laboratory.
"		{ Engineering and Drawing.
"	George Mather Craig.	{ Engineering, Class III.
"	Bernard Parker Haigh,	{ Natural Philosophy.
"		{ Physical Laboratory.
"		{ Engineering and Drawing.
"	Harry Fairlie Hodge.	{ Engineering Laboratory—Electrical.
"	Duncan John Kerr,	{ Mathematics.
"		{ Natural Philosophy.
"		{ Engineering and Drawing.
"		{ Electricity—Pure and Applied.
"	<i>Carlo La Torre.</i>	
"	John Alexander MacConnell.	
"	John Maxwell Scott Maxwell.	
"	Michael Spartali.	
"	Robert Ure,	{ Mathematics.
"		{ Natural Philosophy.
"	John Whitehead.	
"	Sidney Hartley.	
"	John M'Cance,	{ Physical Laboratory.
"		{ Engineering and Drawing.
"		{ Electricity—Pure and Applied.
1905	<i>Frank Sowter Barnwell.</i>	
"	Robert Cuthbertson.	
"		{ Mathematics.
"		{ Natural Philosophy.
"		{ Chemistry.
"	Fredrick Habler Downie,	{ Physical Laboratory.
"		{ Engineering and Drawing.
"		{ Electricity—Pure and Applied.
"	John Christopher Dunlop.	
"	John Dobbie Halliday Dymock.	
"	Philopemen Georgoussis.	
"	Alexander Hutchison,	{ Mathematics.
"		{ Natural Philosophy.
"		{ Engineering and Drawing.
"		{ Electrical Engineering.

		<i>With Special Distinction in</i>
1905	John Kerr.	
„	Alexander Lawrance.	
„	Thomas Muirhead,	Natural Philosophy.
„	Alexander Norwell.	
„	John Thomson,	{ Engineering and Drawing. Electrical Engineering. Mathematics. Natural Philosophy. Physical Laboratory. Electrical Engineering. Engineering and Drawing.
„	Matthew Graham Anderson, . .	
„	James M'Gee Begg.	
„	Alexander Chisholm, M.A.	
„	William Dawson.	
„	Thomas Ellis.	
„	George Henry Forrest.	
„	Tomochika Iwane.	
„	John Kirkwood.	
„	James Macfadzean.	
„	Charles M'Neil.	
„	William George Yeaman.	
1906	Andrew Niven Aikman,	Physical Laboratory.
„	Thomas Adams Andrew.	
„	Andrew Tudhope Clark,	{ Natural Philosophy. Electrical Engineering.
„	James Alexander Cormack.	
„	William Campbell Crockatt, . .	Physical Laboratory.
„	William Francis Maxwell Donald.	
„	John Hyslop Gardner.	
„	John Alexander Henderson.	
„	Frederick Laurence Hislop.	
„	Robert Gerard Addison Holmes.	
„	William Gilchrist Macbeth.	
„	George Gordon Macfarlane.	
„	George Herbert Stevenson,	{ Mathematics. Engineering and Drawing. Electricity—Pure and Applied.
„	William Hugh Young,	{ Mathematics. Natural Philosophy.

DOCTORS OF MEDICINE (M.D.) (O.R.) Honours.

1845	Alexander Lindsay,	Scotland.	1853	Richard Stanistreet,	Ireland.
"	James Craigie Murray,	do.	"	David Knox,	do.
"	Francis Reynolds,	Ireland.	1854	John Lindsay Stewart,	Scotland.
"	John Brown,	Scotland.	"	James Fraser Paton,	do.
"	John Gardiner,	do.	"	David Easton,	Ireland.
"	Donald Cameron,	Isle of Man.	1855	William Leishman,	Scotland.
"	Adam Nicholson,	Scotland.	"	William J. Lewis, New Brunswick	
"	John Duke,	Ireland.	"	Alexander Robertson,	Scotland.
1847	William Parry,	Wales.	1857	Thomas Beaumont,	Ireland.
"	Robert Livingstone,	Scotland.	"	Joseph M. Fleming,	Scotland.
"	Alexander B. Sharpe,	do.	"	Maxwell Rodgers,	Ireland.
1848	Charles H. Hitchen,	England.	1858	John Couper,	Scotland.
"	James Steven,	Scotland.	"	Thomas M'Call Anderson,	do.
"	John Coates,	Ireland.	1859	Daniel Dougal,	do.
1849	Robt. Brown M'Clelland,	do.	1861	William Marshall,	America.
"	Thomas Nicholson,	Scotland.	"	John M. Murray,	Scotland.
"	Robert Settle,	England.	1862	James A. Allan,	do.
"	Richard Thomas Tracy,	Ireland.	1863	Robert M'K. Duncan,	do.
"	Matthew John Rae,	Scotland.	"	George M'Donald,	do.
1850	John Ternan,	Ireland.	"	Samuel J. Moore,	Ireland.
"	John Henry Eddowes,	England.	"	William Fraser,	Nova Scotia.
"	James Brash,	Scotland.	"	T. Algernon Chapman,	Scotland.
1851	Alexander Marshall,	do.	"	Algernon Wood Smith,	do.
"	Andrew Spearing,	Ireland.	"	John P. Atkinson,	England.
"	James B. Montgomery,	England.	1864	John Wyber,	Scotland.
"	Robert Perry,	Scotland.	"	John G. Wilson, M.A.,	do.
"	John Watson, B.A.,	do.	1865	Arthur A. Jamieson,	England
1853	John Ritchie Brown,	do.	1867	Fred. H. Quaife, M.A.,	Sydney, N.S.W.
"	Charles D. Campbell,	Ireland.			

DOCTORS OF MEDICINE (M.D.) (N.R.)

- 1876 ¹ Gardner, William, M.B., England.
- 1877 ¹ Turner, William Y., M.B., Scotland. Thesis, "The Ethnology of the Motu."
- 1879 ¹ Fleming, William James, M.B., Scotland. Thesis, "The Dicrotic Notch in Pulse Tracings."
- 1880 ¹ Oliver, Thomas, M.B., Scotland. Thesis, "Hereditv viewed in its relation to Responsibility."
- 1880 ¹ Bryce, James, M.B., Scotland. Thesis, "That Mankind originated as a Common Family—most probably on a Continent in the Indian Ocean—certainly within the Tropics."
- 1881 ¹ Adams, James Alexander, M.B., Scotland. Thesis, "Anatomical Relation between Abscess of Brain and Aural Disease."
- 1881 ¹ Stewart, Alexander, M.B., Scotland. Thesis, "History of a Personal Attack of Typhoid Fever."
- 1881 ¹ Drummond, James, M.B., Scotland. Thesis, "Sea Sickness: its Etiology, Symptoms, and Treatment."
- 1881 ¹ Macphail, Donald, M.B., Scotland. Thesis, "Chemical Investigations on the Degenerative Changes in Diseased Bone."
- 1882 ¹ Cairns, David, M.B. Thesis, "An Outbreak of Pyæmia."

¹ Commended for Thesis.

- 1882 ¹ Adam, Thomas Bate, M.B., Scotland. Thesis, "The Pathology and Etiology of Elephantoid Disease."
- 1882 ¹ Rankin, Guthrie, M.B., Scotland. Thesis, "Puerperal Fever."
- 1883 ¹ Inglis, David Wood, M.A., M.B., Scotland. Thesis, "On the Prevention of Lead Poisoning among Workers in White Lead Factories."
- 1883 ¹ Newman, David, M.B., Scotland. Thesis, "Displacements of the Kidney."
- 1884 ¹ Lawrie, J. Macpherson, M.B., Scotland. Thesis, "On some Symptoms of Locomotor Ataxy."
- 1884 ¹ Allan, Robert, M.B., Scotland. Thesis, "Dermoid Cysts."
- 1884 ² Middleton, George S., M.A., M.B., Scotland. Thesis, "On the Pathology of Pseudo-Hypertrophic Muscular Paralysis."
- 1884 ² Steven, John Lindsay, M.B., Scotland. Thesis, "The Pathology of Suppurative Inflammations of the Kidneys."
- 1885 ² Mackay, John Yule, M.B., Scotland. Thesis, "The Origin and Development of the Larger Arteries."
- 1885 ¹ Macvie, William, M.B., Scotland. Thesis, "Atrophic Infantile Paralysis."
- 1885 ¹ Dougal, James, M.B., Scotland. Thesis, "Puerperal Pyrexia."
- 1886 ¹ Lawrie, William John, M.B., Scotland. Thesis, "Pathological Formations of the Skin."
- 1886 ² Somerville, William Francis, M.A., B.Sc., M.B., Scotland. Thesis, "Urosemiotic; the Pathological Chemistry of the Urine, the complete Quantitative Analysis of the Urine; a valuable aid to Clinical Diagnosis."
- 1886 ² Stewart, Robert Sloss, M.B., Scotland. Thesis, "Observations on the Spinal Cord in the Insane."
- 1886 ¹ Rankin, Alexander, M.B., Scotland. Thesis, "Cerebral Cases, with remarks."
- 1886 ¹ Auld, Alexander Gunn, M.B., Scotland. Thesis, "Studies in Materia Medica."
- 1887 ¹ Chalmers, Archibald Kerr, M.B., Scotland. Thesis, "The Temperature Curve of Specific Fevers."
- 1887 ¹ Neilson, Henry John, M.B., Scotland. Thesis, "On the observation of the pupil as a guide in the administration of Chloroform."
- 1887 ¹ Brown, John, M.B., Scotland. Thesis, "Maternal Impressions."
- 1887 ¹ Love, John, M.B., Scotland. Thesis, "Three Cases of Cortical Epilepsy considered in relation to the localization of the discharging lesion."
- 1888 ¹ Finlay, David, M.B., Scotland. Thesis, "Clinical Observations on Epileptic Insanity."
- 1888 ¹ Love, James Kerr, M.B. Thesis, "The Limits of Hearing."
- 1888 ¹ Macpherson, Charles, M.B., Scotland. Thesis, "Plural Pregnancies."
- 1888 ¹ Wallace, William, M.B., Scotland. Thesis, "The Field of Vision: with special reference to its Anomalies in Diseases of the Nervous System."
- 1889 ¹ Christie, William Walls, M.B., C.M., Scotland. Thesis, "The Outbreak of Febrile Disease in St. Mary's Roman Catholic Industrial Schools, Glasgow, March 1888: its Clinical Features and Nature."
- 1889 ¹ Kelly, James Kellock, M.B., Scotland. Thesis, "Private Obstetric Practice: an analysis of 3000 consecutive cases."
- 1889 ¹ Mackenzie, William James, M.B., India. Thesis, "The effects of the conditions of London Life on the Nervous System: with remarks on the treatment."
- 1889 ¹ Hinshelwood, James, M.A., M.B., Scotland. Thesis, "A Clinical Study of Syphilitic Diseases of the Nervous System."
- 1890 ¹ Anderson, John Alexander, M.B., Scotland. Thesis, "On Tetanus: with a record of six cases."
- 1890 ¹ Bankier, Alexander Milne, M.B., England. Thesis, "Influenza."
- 1891 ¹ Smith, John Macdowal, M.B., Scotland. Thesis, "The Disposal of Sewage and City Refuse."
- 1891 ³ Rhodes, Hugh, M.B., C.M., England. Thesis, "Koch's Treatment in Phthisis and Lupus."

¹ Commended for Thesis.² Highly Commended.³ With Honours.

- 1891 ¹ Eannatyne, Gilbert Alexander, M.B., C.M., Scotland. Thesis, "The Treatment of Diphtheria by the Injection of the Erysipelas Albumose."
- 1891 ¹ M'Gregor, Andrew Nicholson, M.B., C.M., Scotland. Thesis, "Some Notes on the Repair of Bone, with special reference to Transplantation and other Artificial Aids."
- 1891 ¹ Ramsay, Andrew Maitland, M.B., C.M., Scotland. Thesis, "Exophthalmic Goitre."
- 1891 ¹ Johnstone, John Carlyle, M.B., C.M., Scotland. Thesis, "Some Notes on the use of Sulphonal."
- 1892 ¹ Highet, Hugh, M.B., C.M., Scotland. Thesis, "The Bronchipneumonia of Influenza, as it occurs in the Adult Subject."
- 1892 ¹ Park, Alexander Glen, M.B., C.M., Scotland. Thesis, "Defects of Speech."
- 1893 ¹ Lang, Hugh, M.B., C.M., Scotland. Thesis, "Empyema, with Notes on a Series of Cases."
- 1893 ¹ Gillies, Hugh Cameron, M.B., C.M., Scotland. Thesis, "The Theory of Counter-irritation."
- 1893 ² Carslaw, John Howie, M.A., M.B., C.M., Scotland. Thesis, "On the severer forms of Scarlet Fever, with special reference to Antipyretic Methods of Treatment."
- 1893 ¹ Adam, Robert Hillhouse, M.A., M.B., C.M., Scotland. Thesis, "Observations on some Enteric Fever Epidemics."
- 1893 ¹ Bryce, Alexander, M.B., C.M., Scotland. Thesis, "Sanitation in Dairy Farms in relation to diseases attributable to Cows' Milk."
- 1893 ¹ Dunlop, Alexander Watson, M.A., M.B., C.M., Scotland. Thesis, "A recent Epidemic of Smallpox, with some remarks on Re-vaccination."
- 1893 ¹ Gemmell, William, M.B., C.M., Scotland. Thesis, "On the Treatment of Phthisis by a long Sea Voyage in a sailing ship."
- 1893 ¹ Watson, William, M.B., C.M., Scotland. Thesis, "The Prevention and Treatment of Diphtheria."
1894. ¹ Johnston, John M'Cubbin, M.A., M.B., C.M., Scotland. Thesis, "The Prognosis of Acute Lobar Pneumonia in the Pauper Class."
- 1894 ² Jack, William Robert, B.Sc., M.B., C.M., Scotland. Thesis, "Observations on the Analysis of Voluntary Muscular Movements by certain new Instruments."
- 1895 ¹ Abercrombie, Peter Henderson, M.B., C.M., Scotland. Thesis, "Turbinotomy in Nasal Stenosis: Analysis and Notes of 66 cases."
- 1895 ² Monro, Thomas Kirkpatrick, M.A., M.B., C.M., Scotland. Thesis, "Essays in Neurology; Historical and Clinical."
- 1895 ¹ Banks, Charles, M.B., C.M., Scotland. Thesis, "Observations on Epidemics of Cholera in India with a special reference to their immediate connection with pilgrimages."
- 1895 ¹ Bell, Andrew Lees, M.B., C.M., Scotland. Thesis, "The Influence of a previous sire, and its relations to maternal impressions."
- 1895 ¹ Campbell, Finlay Stewart, M.B., C.M., Scotland. Thesis, "Paroxysmal Haemoglobinuria: its treatment with special reference to the arrest of the Paroxysm by Quinine."
- 1895 ¹ Charles, John, M.B., C.M., Scotland. Thesis, "A contribution to the Meteorology of Sporadic Pneumonia."
- 1895 ¹ Macgregor, John, M.B., C.M., Scotland. Thesis, "On Paralysis following Diphtheria in Children."
- 1895 ¹ Edington, George Henry, M.B., C.M., Scotland. Thesis, "Bile Salts (Glycocholate and Taurocholate Soda) in relation to excretion of Urea, etc."
- 1895 ¹ Hughes, Arthur Davies, M.B., C.M., Wales. Thesis, "Anchylostomiasis."
- 1895 ¹ Marr, Hamilton Clelland, M.B., C.M., Scotland. Thesis, "On Myxoedema and the Functions of the Thyroid Gland: with notes on the treatment of certain cases of Insanity by Thyroid preparations."

¹ Commended for Thesis.² With Honours.

- 1896 ¹ Marshall, Robert James, M.B., C.M., Scotland. Thesis, "The mild Malaria Fevers and their Microbe."
- 1896 ¹ Dittmar, Frederick, M.A., M.B., C.M., Scotland. Thesis, "Scarlatinal Albuminuria."
- 1896 ¹ Gray, Albert Alexander, M.B., C.M., Scotland. Thesis, "An Investigation into some of the Principles of Auscultation."
- 1896 ¹ Nisbet, Adam Thomson, M.B., C.M., Scotland. Thesis, "Observations on some cases of Liver Access."
- 1896 ¹ Todd, James, M.B., C.M., Scotland. Thesis, "Puerperal Scarlatina."
- 1896 ² Kennedy, Robert, M.A., B.Sc., M.B., C.M., Scotland. Thesis, "Studies on the Regeneration of Nerves."
- 1896 ¹ Kirkland, Thomas Speirs, M.B., C.M., Scotland. Thesis, "Quinine Amaurosis."
- 1897 ¹ Don, William Walton, M.B., C.M., England. Thesis, "Thyroid Therapeutics."
- 1897 ¹ Hunter, Walter King, B.Sc., M.B., C.M., Scotland. Thesis, "A contribution to the Etiology of Beri-Beri."
- 1897 ¹ Thomson, James, M.B., C.M., Scotland. Thesis, "Exophthalmic Goitre, with special reference to its treatment by Thymus Gland."
- 1897 ²³ Thomson, Robert Stevenson, B.Sc., M.B., C.M., Scotland. Thesis, "Pertussal Glucosuria, with observations on the reduction of Fehling's solution by the urine in childhood."
- 1898 ¹ Brownlee, John, M.A., M.B., C.M., Scotland. Thesis, "The Diagnosis and Hospital Administration of Scarlatina."
- 1897 ¹ Galloway, Andrew Fleming, M.B., C.M., Scotland. Thesis, "Moveable Kidney; its Aetiology and Symptoms."
- 1897 ¹ Harris, David Fraser, B.Sc., M.B., C.M., Scotland. Thesis, "A Research into the Spectroscopy of Blood-pigment, and its derivatives in health and disease."
- 1897 ¹ Seright, William, M.B., C.M., Scotland. Thesis, "Neurasthenia (nervous exhaustion): a review of the origin and growth of the term, frequency of the disease, and of its chief forms and classifications, symptoms, diagnosis, prognosis, theories and treatment."
- 1897 ¹ Temple, Lewis Dunbar, M.B., C.M., Scotland. Thesis, "Sporadic Cretinism and allied disorders."
- 1897 ¹ Wylie, Richard John, M.B., C.M., Scotland. Thesis, "Pneumonia, with notes on twenty-nine cases."
- 1898 ¹ M'Kenzie, Daniel, M.B., C.M., Scotland. Thesis, "Endemic Goitre, with particular reference to its occurrence in Lanarkshire, and to its Etiology."
- 1898 ¹ Bell, Robert Gordon, M.B., C.M., Scotland. Thesis, "Enteric Studies, chiefly in Aberrant Types."
- 1898 ²³ Findlay, John Wainmann, M.B., C.M., Scotland. Thesis, "The Choroid Plexuses of the Lateral Ventricles, their Anatomy, Functions, and Pathology (in relation specially to Insanity)."
- 1898 ¹ Wilson, James Dunlop Octavus, M.B., C.M., Scotland. Thesis, "Adenoid Vegetations in the Nasopharynx; a Clinical and Pathological Study of 214 Cases."
- 1898 ¹ Biernacki, John Thomson, M.B., C.M., India. Thesis, "Secondary Microbic Invasion occurring in the course of the Commoner Fevers."
- 1898 ¹ Thomson, Henry Hyslop, M.B., C.M., Scotland. Thesis, "Epilepsy: a theory as to its probable cause, with some remarks regarding its relation to Insanity and Hysteria."
- 1898 ¹ Webster, Alfred, M.B., C.M., England. Thesis, "Cardiac Inhibition in relation to Cerebral Anæmia and Epileptiform Crises."

¹ Commended for Thesis.² With Honours.³ Gained a Bellahouston Gold Medal.

- 1899 ¹ Marshall, Campbell Samson, M.B., C.M., Scotland. Thesis, "Antistreptococcus Serum; its application in the treatment of Scarlatina Anginosa."
- 1899 ¹ Primrose, Edward James, M.A., M.B., C.M., Scotland. Thesis, "Notes on the Method and on the Diagnostic Value of the Serum Reaction (Widal's Test) in Enteric Fever; with a record of 149 examinations of Serum made in 57 cases of Enteric Fever, and in 22 other cases."
- 1899 ²³ Hawthorne, Charles Oliver, M.B., C.M., England. Thesis, "Studies in Clinical Medicine."
- 1899 ¹ Blair, David, M.A., M.B., C.M., Scotland. Thesis, "Acromegaly with Insanity."
- 1899 ¹ Gordon, John, M.B., C.M., Scotland. Thesis, "Tuberculin: as a remedy for Lupus, and its position as a Therapeutic Agent in the treatment of Phthisis Pulmonalis."
- 1899 ¹ Kerr, Hugh, M.A., M.B., C.M., Scotland. Thesis, "Recurrent Insanity."
- 1899 ¹ Scott, Robert, M.B., C.M., Australia. Thesis, "A review of Hydatid Disease in Australasia during the decennial period 1888-97."
- 1899 ²³ M'Kendrick, John Souttar, M.B., C.M., Scotland. Thesis, "Zymolysis of Tissue, Physiological and Pathological, with a historical *résumé* of the nature and action of Enzymes."
- 1899 ²³ Scobie, William, M.A., B.D., M.B., C.M., Scotland. Thesis, "The agglutinating reaction in Enteric Fever, with special reference to Prognosis."
- 1899 ¹ Gray, John Gilchrist, M.B., C.M., Scotland. Thesis, "Albuminuria and Nephritis occurring in connection with Scarlet Fever in combination with Varicella, the Varicella occurring during the acute stage or during the period of convalescence."
- 1899 ¹ Macharg, William Edgar, M.B., C.M., Scotland. Thesis, "An analytical account of fifty-seven cases of Puerperal Infection."
- 1899 ¹ Ormond, James Service, M.B., Ch.B., Australia. Thesis, "Some results of treatment as illustrated by the Sphygmograph."
- 1900 ²³ James Fairlie Gemmill, M.A., M.B., C.M., Scotland. Thesis, "A Teratological Study."
- 1900 ¹ James Adam, M.A., M.B., C.M., Scotland. Thesis, "Remarks on the nature and treatment of Asthma."
- 1900 ¹ William Carrick Allan, M.B., C.M., Scotland. Thesis, "Extra-Uterine Pregnancy."
- 1900 ¹ John Laird Yuill, M.B., C.M., Scotland. Thesis, "On the Mental Deterioration in Epilepsy and Hemiplegia."
- 1900 ¹ Leslie Buchanan, M.B., C.M., Ireland. Thesis, "Cyclitis; a Study of the inflammatory exudates into the vitreous body in cases of Cyclitis."
- 1900 ¹ Malcolm Alexander M'Intyre Sinclair, M.B., C.M., England. Thesis, "A Study in Aphasia, with special reference to some of its transitory manifestations."
- 1900 ¹ Annie Louise M'Iloy, M.B., Ch.B., Ireland. Thesis, "Tubal Gestation: its pathology and diagnosis, as illustrated by the record of twenty-two cases."
- 1901 ¹ Alfred George Newell, M.B., C.M., India. Thesis, "Insanitary Areas and Houses in Bombay and their relation to Plague, with schemes for improvement of Areas."
- 1901 ²³ David Louis Cairns, M.B., Ch.B., Scotland. Thesis, "Researches on the agglutinating and prophylactic properties of Blood Serum in cases of Plague, with observations on the haematology and bacteriology of the disease."
- 1901 ¹ John Aitken, M.B., Ch.B., Scotland. Thesis, "Blood Counts in the New Born."

¹ Commended for Thesis.² With Honours.³ Gained a Bellahouston Gold Medal.

- 1901 ¹ Arthur James Ballantyne, M.B., Ch.B., Scotland. Thesis, "Affections of the Eye due to injury by blunt objects."
- 1901 ¹ George Coats, M.B., Ch.B., Scotland. Thesis, "Unilateral Haemorrhagic Retinitis and Haemorrhagic Glaucoma."
- 1901 ¹ John Henderson, M.B., Ch.B., Scotland. Thesis, "Observations on the Maternal Blood at term and during the puerperium."
- 1901 ¹ James Donald Rae Monro, M.A., M.B., C.M., Scotland. Thesis, "A study of Appendicitis in general practice, with an analysis of thirty-six cases."
- 1902 ²³ Alexander Robert Ferguson, M.B., C.M., England. Thesis, "The Leucocytosis of Variola, with a study of the haematopietic organs in the disease, and also of the lesions of the skin."
- 1902 ¹ Andrew Wilson, M.B., C.M., Scotland. Thesis, "A clinical study of the relation of Syphilis to Diseases of the Eye."
- 1902 ¹ Andrew Colville Wilson, B.Sc., M.B., C.M., Scotland. Thesis, "The Medullated Fibres of the Cerebral Cortex."
- 1903 ²³ George Lamb, M.B., C.M., Scotland. Thesis, "On the action of the venoms of the Cobra (*Naja Tripudiana*) and of the Daboia (*Daboia Russellii*) on the red blood corpuscles and on the blood plasma."
- 1903 ²³ William Glen Liston, M.B., Ch.B., India. Thesis, "Aetiology of Malaria."
- 1903 ¹ Charles Campbell Cuthbert, M.A., M.B., Ch.B., Scotland. Thesis, "A clinical study of Renal cases."
- 1903 ¹ James M'Hattie, M.B., Ch.B., Scotland. Thesis, "On the complications occurring in 600 consecutive cases of Scarlatina."
- 1903 ¹ Jean Effie Prowse, M.B., Ch.B., England. Thesis, "The relation of Vesicular Mole to Chorion Carcinoma."
- 1903 ²³ John Hammond Teacher, M.A., M.B., C.M., Scotland. Thesis, "On Chorion-epithelioma and the occurrence of Chorionepitheliomatous and Hydatidiform Mole-like structures in Teratomata: a Pathological and Clinical study."
- 1903 ¹ George Morris Crawford, M.B., Ch.B., Scotland. Thesis, "Nitrogen Excretion in Diphtheria."
- 1903 ¹ Reginald Nairn Dunlop, M.B., Ch.B., Scotland. Thesis, "An Analysis of fifty cases of Eclampsia."
- 1903 ¹ Arthur Robin, M.B., Ch.B., Scotland. Thesis, "A contribution to the Haematology of Puerperal Fever, with some observations on the influence of the intravenous injection of Antistreptococcic Serum."
- 1903 ¹ Donald Sage Sutherland, M.B., Ch.B., Scotland. Thesis, "An investigation into the specific Etiology of Scarlet Fever."
- 1903 ¹ Malcolm Watson, M.B., C.M., Scotland. Thesis, "The effect of Drainage and other Measures on the Malaria of Klang, Federated Malay States."
- 1904 ¹ Adam Brown Kelly, M.B., C.M., D.Sc., Scotland. Thesis, "Contributions to the Pathology and Diagnosis of certain Affections of the Antrum of Highmore."
- 1904 ¹ Daniel Macpherson Taylor, M.A., M.B., C.M., Scotland. Thesis, "Sympathetic Ophthalmitis after Preventive Enucleation."
- 1904 ¹ Ernest Alexander Walker, M.A., M.B., C.M., Scotland. Thesis, "Ten Successive Laparotomies: their History, Clinical Aspects, and Technique."
- 1904 ²³ Harry Egerton Brown, M.B., Ch.B., Scotland. Thesis, "The Brain in Idiocy."
- 1904 ²³ Edward Provan Cathcart, M.B., Ch.B., Scotland. Thesis, "On the occurrence of Antibodies to Ferments in the Normal Blood Serum, with special reference to Antitrypsine."

¹ Commended for Thesis.² With Honours.³ Gained a Bellahouston Gold Medal.

- 1904 ¹ Leonard Findlay, M.B., Ch.B., Scotland. Thesis, "Clinical and Pathological Study of a case of General Tuberculosis, complicated by the presence of Ganglionic Neurogliomata in the Brain, and a Peculiar Vacuolar Degeneration of the Myocardium."
- 1904 ¹ James Dunlop Lickley, M.B., Ch.B., England. Thesis, "The Human Sternum."
- 1904 ¹ Andrew Love, M.B., Ch.B., Scotland. Thesis, "An Investigation into the Leucocytosis of Typhus Fever, with observations on the changes present in the bone marrow, spleen and lymphoid tissues."
- 1904 ¹ Murdoch Macdonald, M.B., Ch.B., Scotland. Thesis, "A Report on the Clinical and Bacteriological Features of Vincent's Angina, with Notes of Cases."
- 1904 ¹ Walter Lewis Thomson, M.B., Ch.B., Scotland. Thesis, "Bacteriological Investigation of a School Outbreak of Diphtheria, with special reference to the Hoffmann Bacillus."
- 1905 ² William Herbert Brown, M.B., Ch.B., Scotland. Thesis, "A Clinical Study of the Glycogenic Reaction in Blood."
- 1905 ² John James Buchan, M.B., Ch.B., Scotland. Thesis, "Bacteriuria in Enteric Fever."
- 1905 ²³ Edward Seymour Chapman, M.B., Ch.B., England. Thesis, "A Histological Study of the Kidney in Scarlatina."
- 1905 ²³ Thomas Divine, M.B., C.M., Scotland. Thesis, "An Inquiry into Infantile Mortality, with special reference to its Causation and Prevention."
- 1905 ²³ William Barr Inglis Pollock, M.B., Ch.B., Scotland. Thesis, "A Bacteriological and Clinical Study of Conjunctivitis."
- 1905 ¹ George Balfour Eadie, M.B., Ch.B., Scotland. Thesis, "Tuberculosis of the Myocardium."
- 1905 ¹ Donald M'Farlane Livingstone, M.B., Ch.B., Scotland. Thesis, "Traumatic Ulcer of the Cornea."
- 1905 ¹ Robert Macnab Marshall, M.B., Ch.B., Scotland. Thesis, "A Clinical and Pathological Study of an unusual case of Progressive Muscular Dystrophy—type facio-scapulo-humeral—with special reference to its Nosology and Pathogeny."
- 1905 ¹ Allan Martin, M.A., B.Sc., M.B., Ch.B., Scotland. Thesis, "The Field of Vision, with special reference to Bjerrum's Screen, with accompanying Charts."
- 1905 ¹ James Blakely Miller, M.B., Ch.B., Scotland. Thesis, "Observations on the Blood in Acute Lobar Pneumonia."
- 1905 ¹ Robert Niven, M.B., Ch.B., Scotland. Thesis, "Smallpox: a Clinical Study of about 2000 cases of the disease."
- 1905 ¹ David Russell, M.B., Ch.B., Scotland. Thesis, "A Study of the Blood in Postmalarial Anæmia as observed in the South of Spain."
- 1905 ¹ John Strathearn, M.B., Ch.B., Scotland. Thesis, "On Obstruction of the Central Artery of the Retina."
- 1905 ¹ Thomas Bird Tierney, M.B., Ch.B., Scotland. Thesis, "The Leucocytosis of Pertussis."
- 1905 ¹ John Wotherspoon, M.B., Ch.B., Scotland. Thesis, "A Contribution to the Study of the Formation and Properties of Nephrotoxins."

¹ Commended for Thesis.² With Honours.³ Gained a Bellahouston Gold Medal.

BACHELORS OF MEDICINE (M.B.). HONOURS.

1866	Robert W. Forrest,	Scotland.	1892	John Morton,	Scotland.
"	Henry T. Pringle,	"	"	James Carslaw, M.A.,	"
1867	Ebenezer Duncan,	"	1894	Alexander MacLennan,	"
"	Joseph Coats,	"	"	Wm. Stewart Cook, B.Sc.,	"
"	James Finlayson,	"	"	Jas. C. Robertson, M.A., B.Sc.,	"
1868	Thomas Barr,	"	"	Jas. Murray Young,	"
"	William MacLachlan,	"	"	John Francis Robt. Gairdner,	"
"	Angus Macmillan,	"	"	John Wainman Findlay,	"
1869	James Coats,	"	1895	Joshua Ferguson, M.A.,	"
1871	David Wilkie,	"	"	Henry Alex. Pattullo,	"
"	John Aikman,	"	"	Ernest A. Walker, M.A.,	"
1872	John D. Macdonald,	"	1896	John Knight,	"
"	Samson Gemmell,	"	"	Madge Speirs Maclean,	"
1876	Geo. S. Middleton, M.A.,	"	1897	John A. C. Macewen, B.Sc.,	"
"	Richard B. Macpherson,	"	"	Thomas Hunter, M.A., B.Sc.,	"
1877	Johan B. Knobel,	Africa.	1898	Wm. Kilpatrick Hutton, M.A.,	"
"	Donald Macphail,	Scotland.	"	Robert Fullarton, M.A.,	"
"	John Carlyle Johnstone,	"	"	William Webster,	"
"	Edward D. M. Mackellar,	"	1899	Alex. Laurie Watson, M.A.,	"
1878	Alexander Fraser,	"	1900	Charles Campbell Cuthbert, M.A.,	"
"	James Morton,	"	"	James Dunlop Lickley,	England.
"	William Partington,	"	1901	Alex. Dey Thompson,	Scotland.
"	Lawrence A. Waddell,	"	"	William Macalister Brown,	"
1879	William K. Peden,	"	1902	Andrew Miller Kerr,	"
"	Ralph D. Stevenson,	Australia.	"	Joseph White, M.A., B.Sc.,	"
1880	Andw. A. Hogarth, M.A.,	Scotland.	"	John Morison,	India.
"	J. M'Gregor-Robertson, M.A.,	"	1903	Spencer Mort,	Scotland.
"	John Lindsay Steven,	"	"	Alex. Matheson, M.A., B.Sc.,	"
1881	John More Young, M.A.,	"	"	Wm. D. H. Stevenson, M.A.,	India.
1882	Robert Beith,	"	"	Carl H. Browning,	Scotland.
1883	John Innes Dunlop,	"	"	Peter L. Sutherland,	"
1884	Charles O. Hawthorne,	England.	1904	Robt. Buchanan Carslaw, M.A.,	"
1886	Alexander Bryce,	Scotland.	"	George Munn Gray,	"
"	Wm. Snodgrass, M.A.,	U.S.A.	1905	George A. Allan,	"
"	John H. Carslaw, M.A.,	Scotland.	"	William B. M. Martin,	Ireland.
1887	William MacLennan,	"	"	James H. Baird, B.A.,	New Zealand.
1891	Hugh Galt,	"	"	John S. Dunn, M.A.,	Scotland.
"	Robert Currie Robertson, M.A.,	"	"	William Rolland,	"

BRUNTON MEMORIAL PRIZE OF £10,

Awarded to the most distinguished Graduate in Medicine of the year.

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| 1880. John Lindsay Steven, M.B., C.M. | 1896. John Knight, M.B., C.M. |
| 1881. John More Young, M.A., M.B., C.M. | 1897. John Allan Craigie Macewen, B.Sc., M.B., C.M. |
| 1882. Robert Beith, M.B., C.M. | „ Thomas Hunter, M.A., B.Sc., M.B., Ch.B. |
| 1883. John Innes Dunlop, M.B., C.M. | 1898. William Kilpatrick Hutton, M.A., M.B., C.M. |
| 1884. Charles Oliver Hawthorne, M.B., C.M. | 1899. Alex. Laurie Watson, M.A., M.B., Ch.B. |
| 1885. Andrew Wilson, M.B., C.M. | 1900. Charles C. Cuthbert, M.A., M.B., Ch.B. |
| 1886. Alexander Bryce, M.B., C.M. | 1901. Alex. Dey Thompson, M.B., Ch.B. |
| 1887. William MacLennan, M.B., C.M. | 1902. Andrew Miller Kerr, M.B., Ch.B. |
| 1888. Landel Rose Oswald, M.B., C.M. | 1903. Spencer Mort, M.B., Ch.B. |
| 1889. William Robert Jack, B.Sc., M.B., C.M. | 1904. Robert B. Carslaw, M.A., M.B., Ch.B. |
| 1890. George Lamb, M.B., C.M. | 1905. George Allison Allan, M.B., Ch.B. |
| 1891. Hugh Galt, M.B., C.M. | |
| 1892. John Morton, M.B., C.M. | |
| 1893. John Johnson Urwin, M.B., C.M. | |
| 1894. Alexander MacLennan, M.B., C.M. | |
| 1895. Joshua Ferguson, M.A., M.B., C.M. | |

THOMAS LOGAN MEDAL AND PRIZE,

Awarded to the most distinguished Graduate in Arts of the year.

- | | |
|--------------------------------------|--|
| 1888. Ernest Findlay Scott, M.A. | 1899. John Lochhead, M.A. |
| 1889. Alfred Ernest Garvie, M.A. | 1900. Mabel Atkinson, M.A. |
| 1890. John Edgar M'Fadyen, M.A. | 1901. Dougald Black M'Quistan, M.A. |
| 1891. James Holm, M.A. | 1902. William Lindsay Thompson, M.A. |
| 1892. Daniel Lamont, M.A. | 1903. William Sutherland, M.A. |
| 1893. Gilchrist Gibb Alexander, M.A. | 1904. { Robert Nicol Cross, M.A. |
| 1894. Henry Noel Brailsford, M.A. | { William Manson, M.A. |
| 1895. William King Gillies, M.A. | { John Miller, M.A. (Beith). |
| 1896. George Donald Valentine, M.A. | { James Carrick Miller Fairlie, M.A. |
| 1897. Gavin Scott, M.A. | 1905. { Constance Helen Margaret Archibald, M.A. |
| 1898. John Lyle Morison, M.A. | |

XII.—DEGREE AND PRIZE LIST.

LIST OF DEGREES

CONFERRED IN THE VARIOUS FACULTIES AND OF PRIZES AND
CERTIFICATES OF HONOUR AWARDED IN THE SEVERAL
CLASSES OF THE UNIVERSITY DURING THE YEAR ENDING
1ST MAY, 1906.

DOCTORS OF DIVINITY (D.D.).

April, 1906.

- Rev. Thomas Burns, Minister of Lady Glenorchy's Parish, Edinburgh.
Rev. Herbert Hensley Henson, B.D., Canon of Westminster Abbey, and
Rector of St. Margaret's, London.
Rev. Malcolm McLean, B.D., Minister of Brodick.
Rev. Donald Macmillan, M.A., Minister of Kelvinhaugh Parish, Glasgow.
Rev. Alexander Morris Stewart, M.A., Minister of High Street United Free
Church, Arbroath.
Monsieur Auguste Wabnitz, Professor in the Faculty of Protestant Theology
at Montauban, France.

DOCTORS OF LAWS (LL.D.).

April, 1906.

- James Stedman Dixon, Coalmaster in Glasgow, Member of the late Royal
Commission on Coal Supplies.
Rev. Moir Duncan, M.A., Principal of the Imperial University (Western
Department), Shansi, China.
Robert Edmund Froude, F.R.S., Superintendent of Admiralty Experiment
Works, and Member of Admiralty Committee on Warship Designs.
Sir James Guthrie, President of the Royal Scottish Academy.
Mungo William McCallum, M.A., Professor of English Literature in the
University of Sydney, N.S.W.
Walter Alexander Raleigh, M.A., Professor of English Literature in the
University of Oxford.
Sir James Henry Ramsay, Bart., M.A., of Bamff.
Monsieur Auguste Rodin, President of the International Society of Painters,
Sculptors, and Engravers.

BACHELORS OF DIVINITY (B.D.).

November, 1905.

- John Guthrie, M.A. Gordon Quig, M.A.
John McFarlane Hamilton, M.A.

April, 1906.

- William Henderson Begg, M.A. Alexander Mackinnon, M.A.
Walter William Aitken Bell, M.A. Thomas Steele, M.A.
Alexander Borland, M.A. John Archibald Glover Thomson, M.A.
James Nash Gourlay, M.A. Robert Cleghorn Thomson, M.A.
Alexander Matheson M'Iver, M.A. William Reid Wiseman, M.A.

BACHELORS OF LAWS (LL.B.).

November, 1905.

Thomas Kinnear Cook, M.A.	Theodore David Lowe, M.A.
Douglas Ferrier, M.A.	Archibald Naismith Main, M.A.
David M'Cowan Hutchison, M.A.	Robert Ralston Ness, M.A.

April, 1906.

Archibald Crawford, M.A.	James White Millen, M.A.
James Lorimer Mackenzie, M.A.	Morton Mungo Muir, M.A.

BACHELORS OF LAW (B.L.).

November, 1905.

Edward David Anderson.

April, 1906.

John Douglas Boswell, B.A.	James Semple Mackintosh.
James Robert Lyons.	John Patrick M'Robert, M.A.
Robert Mackenzie.	John Pirie.

DOCTORS OF MEDICINE (M.D.).

July, 1905.

- James Andrew, M.B., C.M., Scotland. Thesis, "A plea for the Amendment of the present Act relating to Vaccination in Scotland."
 Alexander Wilson, M.B., Ch B., Scotland. Thesis, "Clinical Observations on Empyemata in Children."

November, 1905.

I. WITH HONOURS.

- William Herbert Brown, M.B., Ch.B., Scotland. Thesis, "A Clinical Study of the Glycogenic Reaction in Blood."
 John James Buchan, M.B., Ch.B., Scotland. Thesis, "Bacteriuria in Enteric Fever."
 Edward Seymour Chapman, M.B., Ch.B., England. Thesis, "A Histological Study of the Kidney in Scarlatina."
 Thomas Divine, M.B., C.M., Scotland. Thesis, "An Enquiry into Infantile Mortality, with special reference to its Causation and Prevention."
 William Barr Inglis Pollock, M.B., Ch.B., Scotland. Thesis, "A Bacteriological and Clinical Study of Conjunctivitis."

II. WITH COMMENDATION.

- George Balfour Eadie, M.B., Ch.B., Scotland. Thesis, "Tuberculosis of the Myocardium."
 Donald M'Farlane Livingston, M.B., Ch.B., Scotland. Thesis, "Traumatic Ulcer of the Cornea."
 Robert Macnab Marshall, M.B., Ch.B., Scotland. Thesis, "A Clinical and Pathological Study of an unusual case of Progressive Muscular Dystrophy—type facio-scapulo-humeral—with special reference to its Nosology and Pathogeny."
 Allan Martin, M.A., B.Sc., M.B., Ch.B., Scotland. Thesis, "The Field of Vision, with special reference to Bjerrum's Screen, with accompanying Charts."
 James Elakely Miller, M.B., Ch.B., Scotland. Thesis, "Observations on the Blood in Acute Lobar Pneumonia."

- Robert Niven, M.B., Ch.B., Scotland. Thesis, "Smallpox: a Clinical Study of about 2000 cases of the disease."
 David Russell, M.B., Ch.B., Scotland. Thesis, "A Study of the Blood in Postmalarial Anæmia as observed in the South of Spain."
 John Strathearn, M.B., Ch.B., Scotland. Thesis, "On Obstruction of the Central Artery of the Retina."
 Thomas Bird Tierney, M.B., Ch.B., Scotland. Thesis, "The Leucocytosis of Pertussis."
 John Wotherspoon, M.B., Ch.B., Scotland. Thesis, "A Contribution to the Study of the Formation and Properties of Nephrotoxins."

III. ORDINARY DEGREE.

- Robert Hugh Allen, M.B., C.M., Scotland. Thesis, "Some main difficulties in the diagnosis of Infective Diseases."
 John Brunton, M.B., Ch.B., England. Thesis, "Traumatic Neurasthenia with Illustrative Cases."
 William Cochran Burns, M.B., Ch.B., Scotland. Thesis, "Primary Glaucoma, with an Analysis of Thirty-four Cases."
 John Crow, M.B., Ch.B., Scotland. Thesis, "An unusual case of Cyanosis."
 Sarah Davidson, M.B., Ch.B., Scotland. Thesis, "Epidemic Pneumonia, with special reference to an outbreak occurring in the Protestant Industrial School for Boys, Leith, 1902."
 William Fletcher Kay, M.B., Ch.B., Scotland. Thesis, "Affections of the Serous and Synovial Membranes in Scarlet Fever."
 Duncan MacDonald, M.B., C.M., Scotland. Thesis, "The Cause and Prevention of Pulmonary Tuberculosis in the West Highland Rural Districts of Scotland."
 Joseph MacGowan, M.B., C.M., Scotland. Thesis, "Infant Feeding, with an Analytical and Microscopical Examination of Human Milk in thirteen illustrative cases."
 Daniel Richmond, M.B., C.M., Ireland. Thesis, "Acute and Chronic Discharges from the Middle Ear, their Causes and Treatment, with Reports of seventeen illustrative cases."
 Thomas Ritchie Rodger, M.B., Ch.B., Scotland. Thesis, "Hysteria in the Male."
 William Wright, B.Sc., M.B., Ch.B., Scotland. Thesis, "Hygiene in the Mercantile Marine."

April, 1906.

- Richard John Edwards, M.B., C.M., Wales. Thesis, "Syphilis."
 George Hanson, M.B., C.M., Scotland. Thesis, "Oblique Inguinal Hernia, with special reference to the Reducible Variety and its treatment—Cases."
 David Connor Kirkhope, M.B., C.M., Scotland. Thesis, "Placental Infarcts."

BACHELORS OF MEDICINE AND BACHELORS OF SURGERY (M.B., CH.B.).

July, 1905.

I. HONOURS.

- | | | | |
|------------------------------------|-----------|-----------------------|----------------|
| George Allison Allan, ¹ | Scotland. | James Henderson | } New Zealand. |
| William Blair Morton } | | Baird, B.A., | |
| Martin, | Ireland. | John Shaw Dunn, M.A., | Scotland. |
| | | William Rolland, | .. |

¹ Mr. Allan gains the Brunton Memorial Prize of Ten Pounds, awarded to the most distinguished Graduate in Medicine of the year.

II. COMMENDATION.

Alexander Cappie Russell,	Scotland.	Walter George Macdon-	} Scotland.
Andrew Blair Aitken,	"	ald, M.A.,	
James Mill Renton,	"	Arthur Innes,	
John Logan Stewart, M.A.,	"	William Grier,	
William Boyd Jack,	"	Jeannie Thomson Clark,	
Henry Sherwood Ranken,	"	William Love Kirkwood,	"

III. ORDINARY DEGREES.

William Smith Allan,	Scotland.	Alexander Leggat,	Scotland.
Andrew Allison,	"	George Hugh Logan,	"
Andrew Woodroffe Anderson,	"	William Jamieson Logie,	"
John Bain, M.A.,	"	John Bertram M'Cabe,	"
Annie Agnes Baird, } M.A., }	New Zealand.	Duncan M'Ewan,	"
Hugh Barr,	Scotland.	Hugh Allan Macewen,	"
Andrew Farm Bell,	"	Robert Maxwell Macfarlane,	"
Ethel Lily Chapman,	England.	James Denniston Macfie,	Ireland.
Robert Wilson Dale, M.A.,	Scotland.	Milne M'Intyre,	Scotland.
David William Davidson,	Ireland.	John M'Millan,	"
Robert Scott Dewar, M.A.,	Scotland.	Peter Maguire,	"
Hugh M'Millan Donaldson,	"	Robert May,	"
Allan Campbell Douglas,	England.	Henry Joseph Milligan,	"
Eric John Dyke,	South Africa.	Macdonald Munro,	"
Hamilton William } Dyke, }	"	Frank Anderson Murray,	"
Alexander Burns Ferguson,	Scotland.	John Dunn Nisbet,	"
Mary Theresa Gallagher,	England.	David Penman,	"
William Gilchrist,	Scotland.	Cunison Deans Rankin,	"
William Harold Gillatt,	England.	Thomas Thomson Rankin,	"
William Macmillan Gil- } mour, }	Scotland.	John Reid,	"
Joseph Glaister,	"	Frank Donald Scott,	"
Louis Leisler Greig,	"	Jane Reid Shaw,	"
Alexander Robertson } Forrest Hay, }	"	Lily Smellie,	"
James Waugh Hay,	"	James Alexander Somerville,	"
Ralph Vincent Howell,	"	Arthur Anderson Stewart,	"
John Monnette Huey,	Ireland.	Daniel Stewart,	"
James Hunter,	Scotland.	William Alexander Stuart,	"
Harry Stewart Hutchison, } B.Sc., }	"	Joseph Roderick Sutherland,	"
Arnold Ernest Jones,	"	Elizabeth Taylor Talbert,	"
Robert Dallas Kennedy,	"	John Taylor,	"
		William Lind Walker, M.A.,	"
		Robert Wallace,	"
		Alexander MacMillan Watson,	"
		Archibald Crombie West,	"
		Archibald Simpson Wilson,	"

November, 1905.

Scott Campbell Adam,	Scotland.	David Guthrie Hunter, }	} Scotland.
Thomas Brodie,	"	M.A.,	
Walter Duffy, M.A.,	"	George Notman Kirkwood,	"
James Fairley,	"	Thomas M'Cosh,	"
Alexander Graham, B.Sc.	"	John Macintyre,	"
John Isdale Greig, M.A., }	"	Jane Stark M'Lauchlan,	"
B.Sc., }	"	William Macleod,	"
John Hammond,	England.	Matthew Thompson Drum-	} "
James Duncan Hart,	Scotland.	mond M'Murich,	
Frank Hauxwell,	New Zealand.	Margaret Elizabeth M'Neill,	Ireland.

Mary Lauchline M'Neill,	Scotland.	Campbell Ross,	Scotland.
Richard Cameron Mac-	}	John Macdonald Ross,	"
pherson,		John Cooper Russell, M.A.,	
William Struthers Moore,	"	Edward Louis Augustin }	"
Gavin Denholme Muir,	"	Sieger,	
Arthur Geoghegan Paxton,	England.	Robert Alexander Slater,	"
John Pearson,	Scotland.	Mary Spence,	"
Ethel Jane Mildred Pryce,	Wales.	George Young,	"
Arthur Robertson,	Scotland.		

December, 1905.

Harry Prescott Fairlie, Scotland.

DOCTORS OF SCIENCE (D.Sc.).

April, 1906.

Alexander Wood, B.Sc. Thesis, "Papers on (1) The effect of a Magnetic Field on the Viscosity of Nickel and Iron, (2) The effect of a Magnetic Field on Subsidence of Torsional Oscillations in Nickel and Iron, (3) Spontaneous Ionization of Air in Closed Vessels."

BACHELORS OF SCIENCE (B.Sc.).

November, 1905.

In Pure Science.

William Brown, M.A.	Thomas David King Murray, M.A.
James Mair Frew, M.A. ¹	Ralph Montgomery Fullarton Picken. ³
Thomas Murray MacRobert, M.A. ²	John Purdie, M.A.
John Clark Middleton, M.A. ³	Jane Helen Ross, M.A.
James Moyes, M.A.	George Duncan Campbell Stokes, M.A. ²

In Engineering.

Matthew Graham Anderson. ⁴	Tomochika Iwane.
James M'Gee Begg.	John Kirkwood.
Alexander Chisholm, M.A.	James Macfadzean.
William Dawson.	Charles M'Neil.
Thomas Ellis.	William George Yeaman.
George Henry Forrest.	

April, 1906.

In Pure Science.

John Fotheringham. ³	Neil M'Arthur, M.A. ⁵
Robert Hamilton, M.A. ²	John Stewart, M.A. ³
Robert Jack, M.A. ⁵	David Thomson, M.A. ⁶

¹ With Special Distinction in Mathematics.

² With Special Distinction in (a) Mathematics, (b) Natural Philosophy.

³ With Special Distinction in Zoology.

⁴ With Special Distinction in (a) Mathematics, (b) Natural Philosophy, (c) Physical Laboratory, (d) Electrical Engineering, (e) Engineering and Drawing.

⁵ With Special Distinction in (a) Mathematics, (b) Natural Philosophy, (c) Astronomy.

⁶ With Special Distinction in Chemistry.

In Engineering.

Andrew Niven Aikman. ¹	John Alexander Henderson.
Thomas Adams Andrew.	Frederick Laurence Hislop.
Andrew Tudhope Clark. ²	Robert Gerard Addison Holmes.
James Alexander Cormack.	William Gilchrist Macbeth.
William Campbell Crockatt. ¹	George Gordon Macfarlane.
William Francis Maxwell Donald.	George Herbert Stevenson. ³
John Hyslop Gardner.	William Hugh Young. ⁴

CERTIFICATES OF PROFICIENCY IN ENGINEERING SCIENCE.

November, 1905.

Samuel Blackley.	James Macfadzean.
William Dawson.	

April, 1906.

Andrew Tudhope Clark.	Frederick Laurence Hislop.
James Alexander Cormack.	Robert Gerard Addison Holmes.
William Francis Maxwell Donald.	Allan Kirkwood.
John Hyslop Gardner.	William Gilchrist Macbeth.

MASTERS OF ARTS (M.A.).

July, 1905.

WITH HONOURS.

With Second-Class Honours in Classics.

Kenneth Stewart.

November, 1905.

I. WITH HONOURS.

With First-Class Honours in Classics, and First-Class Honours in Semitic Languages.

James Carrick Miller Fairlie.

* *With First-Class Honours in Modern Languages, and First-Class Honours in Economic Science.*

Constance Helen Margaret Archibald.

With First-Class Honours in Mental Philosophy, and Second-Class Honours in Classics.

Archibald Allan Bowman.

With First-Class Honours in Mathematics and Natural Philosophy.

Neil M'Arthur.	Leonard James Russell.
Thomas Murray MacRobert.	George Duncan Campbell Stokes.

¹ With Special Distinction in Physical Laboratory.² With Special Distinction in (a) Natural Philosophy, (b) Electrical Engineering.³ With Special Distinction in (a) Mathematics, (b) Engineering and Drawing, (c) Electricity, Pure and Applied.⁴ With Special Distinction in (a) Mathematics, (b) Natural Philosophy.

With First-Class Honours in English.

Isabel Margaret Milligan.

With First-Class Honours in Modern Languages.

Annie Murray Macgregor.

With Second-Class Honours in Classics, and Second-Class Honours in Mathematics and Natural Philosophy.

William Buchan Donald.

With Second-Class Honours in Classics.

Mary Scott Mackenzie.

Tennant Sloan.

With Second-Class Honours in Mental Philosophy.

Henry Martyn Trafford.

With Second Class Honours in Mathematics and Natural Philosophy.

Donald Macphie.

John Purdie.

With Second-Class Honours in English.

Richard Murray.

Dugald Ferguson Percy.

II. ORDINARY DEGREES.

Alexander Kerr Aitken.

Alexander Ballantyne.

Mary Wilson Barrie.

Alexander Beaton.

John Cleminson Bell.

William Blue.

Wilhelmina Reid Brand.

Joseph Weir Buchanan.

John Cook.

Mary Darroch Currie.

Robert Dickie.

Charles Duguid.

James Kirkwood Dunlop.

George Sutherland Fraser.

Seymour Graham.

Agnes Harper.

James Henderson.

Ruby Ferguson Henderson.

Frederick Robert Hughes Hutton.

William King.

Margaret Mary Kirk.

Peter Scott Kirkwood.

Jessie Grant Morison Logan.

James Black Love.

Alice Hilda Macalpine.

Ellen Catherine Macfarlane.

Malcolm M'Kinnon.

George Macleod.

James Henderson Marr.

Jessie Vallance Masterton.

Mary Daisy Mathieson.

John Millar.

Grace Morrison.

Donald Macdonald Nicolson.

George Pairman.

Malcolm Pollock.

William Potter.

John Rankine.

Maggie Miller Reid.

George Russell.

Hugh Douglas Sempill.

Robert Simpson.

Robert Skelley.

Elizabeth Somerville.

William Sommerville.

Henry Glassford Bell Spens.

Andrew Templeton.

James Thomson (Millerston).

William Whitehead.

April, 1906.

I. WITH HONOURS.

With First-Class Honours in Economic Science, and Second-Class Honours in Mathematics and Natural Philosophy.

Gilbert Pitcairn Hogg.

With First-Class Honours in Modern Languages.

Janey Aitken Keddie.

Mary Margaret Waddington.

With Second-Class Honours in Classics, and Third-Class Honours in English.

Thomas Logan Douglas.

With Second-Class Honours in Classics.

Oswald James Gardner.

Elias Henry Jones.

Alexander Colquhoun Grant.

Euphemia Wenna Sutherland.

Elton Lawrence Gueritz.

With Second-Class Honours in English.

James M'Arthur.

With Second-Class Honours in Modern Languages.

Elizabeth Alexander Forrest.

Annie Stewart Robertson.

William Angus Munro.

With Third-Class Honours in English.

Joan Dorothea Hughes.

II. ORDINARY DEGREE.

Mary Alexander.

George Muir Fraser.

Dorothy Spence Allan.

William Roberts Gardiner.

Jessie Anderson.

Alexander Gardner.

John Wilson Anderson.

William Gillies.

Robert Richmond Archibald.

John Radcliffe Grice.

Daniel Gibson Baine.

Elizabeth Rowat Haddow.

Thomas Barbour, B.Sc.

Robert Hamilton.

Thomas Baxter.

James Harper.

George Bell.

James Hendry.

Robert Mitchell Bernard.

Samuel Fowler Hunter.

Bruce Beveridge Blackwood.

Duncan Bell Hutchinson.

Jean Wilson Bow.

George Pratt Insh.

David Burns.

Lizzie Macnaughton Jardine.

Catherine Love Campbell.

Robert Hanna Johnstone.

David Carson.

Effie Grace Kirkwood.

Arthur John Jenkins Carter.

John Lamb.

David Alexander Findlay Clark.

Janet Lamond.

Duncan Walker Clark.

John Finlayson Lang.

Richard Clayton Corrie.

Thomas Douglas M'Millan Latta.

Robert William Craig.

James Robert Lee.

Walter Scott Lang Dalglish.

Robert Ewing Lee.

Joseph Davidson.

David Taylor Leggat.

William Smellie Deans.

Eliza Boyd Leiper.

Gavin M'Culloch Donald.

Catherine Lindsay.

William Johnstone Dow.

John Littlejohn.

Charles Edward Duff.

Mary Maben.

Thomas Duncan.

David M'Adam.

Marguerite Morton Dyer.

Catherine M'Ewan.

William James Falside.

Margaret Allen M'Geachin.

Charles Forsyth.

Robert M'Gown.

James Willison Forsyth.

Ebenezer Maitland Macharg.

Alexander Mackay.
 Robert M'Kinlay.
 Alexander MacLean.
 Jessie Marjorie M'Leish.
 Kenneth Macleod.
 Agnes Jack M'Millan.
 William M'Minn.
 Christian Wallace M'Nabb.
 Katherine Thomson M'Nidder.
 Farquhar Macrae.
 Margaret Ferguson Macready.
 Alexander Fisher MacRobert.
 James Hunter Main.
 William Murray Milne.
 James Hendrie Mitchell.
 Margaret Battison More.
 Marion Muir.
 John Martin Munro.
 Margaret Munro.
 Robert Welch Murchie.
 Isabella M'Phail Murdoch.
 John Niven.
 John Reid Orr.
 Jeanie Stewart Oswald.
 Samuel Barr Patrick.
 Samuel Rae.
 Caroline Ross Reid.

James Ritchie (Fauldhouse).
 Alexander David Ross.
 Henry Ross.
 Mary Bella Ross.
 Stewart Louis Walter Ross.
 Margaret Gibson Russell.
 James M'Alpine Scott.
 Jean Young Scott.
 William Robert Smellie.
 Thomas Smith (Cambuslang).
 William James Smith.
 William Stevely.
 Edward James Alexander Stewart.
 James Stewart (Lochee).
 Jane Boyd Stewart.
 John William Stewart.
 James Struthers.
 James Barr Struthers.
 Thomas Lindsay Turner.
 David Johnston Wallace.
 Andrew Kerr Walton.
 Margaret Waugh.
 John Wilson.
 Helen Erskine Wright.
 Jane Paton Young.
 Annie Yuill.

DIPLOMA IN EDUCATION.

November, 1905.

Diploma with Distinction in English, including History.

Theodore Douglas Dunn, M.A.

April, 1906.

Diploma with Distinction in (a) Mathematics, (b) Science.

Neil M'Arthur, M.A., B.Sc.

Diploma with Distinction in Classics.

Walter Malcolm MacCulloch, M.A.

Joanna Mary Wilson, B.A. (Dublin).

John M'Phee, M.A.

Diploma with Distinction in Mathematics.

Muriel Giffen Lindsay, M.A.

Donald Macphie, M.A.

Margaret Hay Livingston, M.A.

Diploma with Distinction in Science.

Constance May.

Diploma with Distinction in English, including History.

John Laing Kinloch, M.A.

Eliza Robertson Stevenson.

Katharine Thomson M'Millan, M.A.

Diploma with Distinction in French and German.

Annie Murray Macgregor, M.A.

Janet Isabel Macphail, M.A.

General Diploma.

Thomas Baxter, M.A.

Elsie Fraser Macdonald, M.A.

Agnes Charlotte Lamb, M.A.

Alexander David Ross, M.A.

FIRST, SECOND, THIRD, AND FOURTH PROFESSIONAL EXAMINATIONS
FOR M.B., CH.B.

The following passed with distinction in the subjects indicated :

FIRST EXAMINATION.

October, 1905.

In Botany and Zoology—William Howat, M.A. ; in Botany and Physics—David Thomas Crichton Frew, William M'Adam, M.A. ; in Botany and Chemistry—James Lachlan Ure ; in Botany—Alexander John Archibald, James Thomson Dick, David Campbell Suttie, Douglas Young ; in Zoology—James Kirkwood Dunlop, William Howie, Agnes Mary M'Michael, John Park Mathie, Henry Joseph Windsor ; in Physics—James Buchanan, John Gibson, Edward George Glover, Robert Dunlop Goldie, Kenneth Charles Gordon Gray, Allan Byars Hamilton, William Thomson Lindsay, Robert Buchanan Forbes M'Kail, George Macleod, Mary Cochran Mitchell, John M'Naught Scott, M.A., David Yellowlees.

April, 1906.

In Botany—Herbert Matthew Williamson ; in Zoology—James Thomson Dick, Edward George Glover, James Hendry, Thomas Jones Mackie, Harold Edward Whittingham ; in Physics—Arthur Munby Bayne, Carl Joseph Barrett Buchheim, Agnes Mary M'Michael, Ellen Brown Orr, Florence Elizabeth Sexton, John Youngson Wood ; in Chemistry—James Dunlop, M.A. ; Allan Byars Hamilton, Malcolm Angus Macdonald, Charles Lindsay Sutherland.

SECOND EXAMINATION.

October, 1905.

In Anatomy, Physiology, and Materia Medica and Therapeutics—David Alexander Thomson, M.A. ; in Anatomy and Physiology—Alex. Tulloch Inglis Macdonald ; in Physiology—Matthew Ignatius Thornton Cassidy, Arthur Drummond Downes, M.A., John Clark Middleton, M.A., Thomas Miller, Ralph Montgomery Fullarton Picken ; in Materia Medica and Therapeutics—James Hogg Martin, John Wilson Miller, Campbell Kay Stevenson, Hugh Johnstone Thomson, Matthew Young.

April, 1906.

In Anatomy, Physiology, and Materia Medica and Therapeutics—John Cruickshank ; in Anatomy and Physiology—Robert Macnair Walker ; in Anatomy—Neil Campbell Scott, John Stewart, M.A. ; in Physiology—Mabel Foley, Benjamin Hutchison, James Walter M'Leod, William Aikman Muir, Albert Rutherford Paterson, Nicol M'Nicoll Rankin, Jessie Capie Russell, Hugh Cochrane Storrie, John Shedden Thomson ; in Materia Medica and Therapeutics—Robert Rankin Bow, Arthur Drummond Downes, M.A. ; Frank Crombie Macaulay, Adam Patrick, M.A.

THIRD EXAMINATION.

October, 1905.

In Pathology—James Dunlop Kidd; in Medical Jurisprudence and Public Health—Peter Mitchell, M.A.

April, 1906.

In Pathology and Medical Jurisprudence and Public Health—Lawrence Storey; in Pathology—Thomas Hay Campbell, Robert Govan, Thomas Miller, Matthew John Stewart; in Medical Jurisprudence and Public Health—Alexander Scott.

THIRD EXAMINATION FOR M.B., C.M.

October, 1905.

In Forensic Medicine—Robert Stewart M'Kim, M.A.

FOURTH EXAMINATION.

July, 1905.

In (a) Surgery and Clinical Surgery, (b) Practice of Medicine and Clinical Medicine—Jeannie Thomson Clark, Peter Maguire; in (a) Surgery and Clinical Surgery, (b) Midwifery—James Henderson Baird, B.A.; in Surgery and Clinical Surgery—Hugh Allan Macewen; in Medicine and Clinical Medicine—George Allison Allan, Andrew Allison, John Shaw Dunn, M.A., Arthur Innes, William Boyd Jack, Cunison Deans Rankin, John Logan Stewart, M.A., John Taylor.

BURSARY EXAMINATION.

October, 1905.

The figure (2) denotes students of the second year.

The following are the first fifty-three names in the order of merit, viz.:

1. Bryce K. N. Wyllie, Dumfries Academy.
2. Helen B. S. Lennox, Spier's School, Beith.
3. Alexander R. Brown, Airdrie Academy and Whitehill School, Glasgow.
4. Ruth E. Marwick, Hillhead High School, Glasgow.
5. James Porter, Whitehill Higher Grade School, Glasgow.
6. Caleb A. Stewart, High School, Glasgow.
7. John S. Anderson, Whitehill Higher Grade School, Glasgow.
8. Hector J. W. Hetherington, Dollar Institution.
9. William C. Cameron, Rothesay Academy.
10. Margaret E. Taylor, The Park School, Glasgow.
11. George A. M. Dickson, Ayr Academy.
12. James D. Walker, Hutchesons' Grammar School, Glasgow.
13. John V. M'Lean, Pupil Teachers' Institute, Glasgow.
14. Archibald Mathieson, Grammar School, Campbeltown.
15. Mary S. Anderson (2), Whitehill Higher Grade School, Glasgow.
16. John O. Taylor, Glasgow Academy.
17. John W. T. Dickie, Ayr Academy.
18. George D. Henderson, High School, Glasgow.
19. John M. Short, High School, Stirling.
20. Alexander S. Fulton, Spier's School, Beith.
21. Thomas S. Campbell, Hutchesons' Grammar School, Glasgow.
22. Frederick A. Steuart (2), The City of London School.

23. Catherine Craig, Girls' High School, Garnethill, Glasgow.
24. Donald C. Smith, Pupil Teachers' Institute, Glasgow.
25. Nettie H. Stein, Girls' High School, Garnethill, Glasgow.
26. John T. Black, Ayr Academy.
27. William S. Buchan, Spier's School, Beith.
28. George Hope, High School, Oban.
29. Thomas J. Mackie, Hamilton Academy.
30. John A. Harper, Hillhead High School, Glasgow.
31. Henrietta H. Duff, Girls' High School, Garnethill, Glasgow.
32. George Taylor, Glasgow Academy.
33. John Falconer, Newmilns Public School.
34. Robert M. M'Minn, Grammar School, Campbeltown, and Spier's School, Beith.
35. Robert M. Walker, Hamilton Academy.
36. Archibald U. Millar, Hillhead High School, Glasgow.
37. James Stothers, Hamilton Academy.
38. Janet A. Livingston, Bellahouston Academy, Glasgow.
39. Robert Thomson, Kilmarnock Academy.
40. William Sneddon, Spier's School, Beith.
41. John Smith, Hutchesons' Grammar School, Glasgow.
42. Robert Drummond, Hutchesons' Grammar School, Glasgow.
43. Adam Scott, Paisley Grammar School.
44. Daniel W. Ritchie, Pupil Teachers' Institute, Glasgow.
45. Kenneth N. MacLean, Public School, Wishaw.
46. Annie I. Henderson, The Park School, Glasgow.
47. Robert H. Deans, Spier's School, Beith.
48. Nicolas Gebbie, Hutchesons' Grammar School, Glasgow.
49. Peter M. Stewart (2), Greenock Academy.
50. George A. Anderson, Greenock Academy.
51. Walter Brown (2), Allan Glen's School, Glasgow.
52. Daniel Gibb, Greenock Academy.
53. John M. Graham, Glasgow Academy.

UNIVERSITY PRIZES.

I.—FOR ESSAYS.

The GARTMORE GOLD MEDAL, for the best Essay on "The State as a Moral Agent."

William M'Kelvie.

A COULTER PRIZE OF FIVE POUNDS, for the best Essay on "Platonism in English Poetry."

David Ogg.

A COULTER PRIZE OF FIVE POUNDS, for the best Latin Essay on the following subject: "Imperium et Libertas."

Eric D. Macgregor.

The HENDERSON PRIZE OF TWENTY GUINEAS, for the best Essay on "Modern Materialism: a Statement and Criticism."

Hugh A. Reyburn.

The DOBBIE-SMITH GOLD MEDAL, for the best Essay on a Botanical Subject, with Macroscopic and Microscopic Specimens.

Helen M. Armour, M.A.

II.—FOR EXAMINATIONS.

An ARNOTT PRIZE of £25, for an examination in Physiological Physics.
John C. Middleton, M.A., B.Sc.

An ARNOTT PRIZE of £15, for an examination in General Physics.
Robert B. F. M'Kail.

The FINDLATER SCHOLARSHIP PRIZE, value £38, for examination
in the subjects for the degree of B.D.

Robert C. Thomson, M.A.

The GLADSTONE HISTORICAL PRIZE of £21, for an examination in
English History.

Henry G. B. Spens, M.A.

THOMAS LOGAN MEMORIAL MEDALS, to the graduates in Arts of
the year (1905) with the highest marks in the Degree examinations.

James Carrick Miller Fairlie, M.A., with First-Class Honours in
(a) Classics, (b) Semitic Languages;

Constance Helen Margaret Archibald, M.A., with First-Class Honours in
(a) Modern Languages, (b) Economic Science.

The BRUNTON MEMORIAL PRIZE OF TEN POUNDS, to the most
distinguished graduate in Medicine of the year (1905).

George Allison Allan.

III.—FOR THESES.

BELLAHOUSTON GOLD MEDALS, for Eminent Merit in Theses for
M.D. (alphabetically arranged).

Edward Seymour Chapman, M.D.

Thomas Divine, M.D.

William Barr Inglis Pollock, M.D.

CLASS PRIZES.

Faculty of Theology.

DIVINITY.

PROFESSOR H. M. B. REID, D.D.

SENIOR CLASS.

I. Students of the Third Year :—

1. John A. G. Thomson, M.A., Glasgow (Caird Prize of £5 5s. in books,
Cleland and Rae-Wilson Gold Medal, Dickson Prize of £2 18s. 6d.
in books).

2. Robert C. Thomson, M.A., Glasgow.

3. John Martin, M.A., Glasgow.

4. Angus J. M'Vicar, M.A., North Uist.

Honourable Mention—Gavin Lawson, M.A., Shettleston; Dugald M'Callum,
M.A., Kintyre; Peter J. M'Iver, Stornoway.

Dowanhill Prizes for Elocution—

1. (£20) Peter J. M'Iver, Stornoway.

2. (£10) William Reid Wiseman, M.A., Stepps.

II. Students of the Second Year :—

1. James H. Cockburn, M.A., Paisley (Caird Prize of £5 5s. in books).
2. Alexander Moffatt, M.A., Glasgow.
3. James C. M. Fairlie, M.A., Paisley.
4. Archibald Campbell, M.A., Eigg.
5. John Macfarlane, M.A., Glasgow.

Honourable Mention—John Main, Nairn ; George W. Walker, M.A., Glasgow ; John M. Woodburn, M.A., Cassillis.

III. Students of the First Year :—

1. Robert H. Napier, M.A., Dunblane (Caird Prize of £5 5s. in books).
2. Andrew C. Baird, M.A., B.Sc., Airdrie.
3. John M. Hay, M.A., Tarbert.
4. William D. Macgill, M.A., Irvine.
5. William Clark, M.A., Larkhall.

Honourable Mention—Robert S. Armstrong, M.A., Glasgow ; Thomas S. Glen, Paisley ; John Mercer Hunter, M.A., Ayr.

DIVINITY AND BIBLICAL CRITICISM.

PROFESSOR WILLIAM STEWART, D.D.

I. For Examinations :—

SENIOR DIVISION.

1. John A. G. Thomson, M.A., Glasgow (Cleland and Rae-Wilson Gold Medal).
2. Robert C. Thomson, M.A., Glasgow.
3. William Reid Wiseman, M.A., Stepps.
4. Gavin Lawson, M.A., Shettleston.

JUNIOR DIVISION.

1. James C. M. Fairlie, M.A., Paisley.
2. James H. Cockburn, M.A., Paisley.
3. John Macfarlane, M.A., Glasgow.

Proxime accesserunt—John M. Woodburn, M.A., Cassillis ; Archibald Campbell, M.A., Eigg.

II. For Essays :—

1. James H. Cockburn, M.A.
2. John A. G. Thomson, M.A.
3. Robert C. Thomson, M.A.

Proxime accesserunt—John M. Woodburn, M.A. ; Gavin Lawson, M.A. ; John Macfarlane, M.A. ; James F. M'Creath, M.A., Newton-Stewart.

HEBREW AND SEMITIC LANGUAGES.

PROFESSOR JAMES ROBERTSON, D.D.

I. SENIOR HEBREW CLASS.

1. John M. Woodburn, M.A., Cassillis (Cleland and Rae-Wilson Gold Medal).
2. Samuel F. Hunter, Brisbane, Queensland.
3. Alexander Moffatt, M.A., Glasgow.
4. George W. Walker, M.A., Glasgow.

Next in Order of Merit—Matthew Biggar, M.A., Polmont.

Second Year's Attendance—William D. Macgill, M.A., Irvine.

For Expository Essays.

1. John M. Woodburn, M.A.
2. John Macfarlane, M.A., Glasgow.

For Recitation of Selected Chapters.

1. Samuel F. Hunter.
2. Alexander Moffatt, M.A.
3. John A. Swan, M.A., Greenock.

Vacation Exercise: Essay on the "Servant of the Lord

John A. G. Thomson, M.A., Glasgow.

II. JUNIOR HEBREW CLASS.

1. Andrew C. Baird, M.A., B.Sc., Airdrie.
2. Thomas S. Glen, Paisley.
3. Robert S. Armstrong, M.A., Glasgow.
4. Neil M'Caig, M.A., Glasgow.
5. Ian D. Neilson, M.A., Greenock.
6. John C. Bell, M.A., Dumfries.

Next in Order of Merit—John M. Hunter, M.A.

For Special Private Readings.

1. Andrew C. Baird, M.A., B.Sc.
2. Ian D. Neilson, M.A.
3. Thomas S. Glen.

III. ARABIC CLASS (ADVANCED).

Neil Conley, Campeltown (Prize awarded by the Glasgow University Oriental Society).

IV. SYRIAC CLASS.

Robert C. Thomson, M.A., Glasgow.
John A. G. Thomson, M.A., Glasgow.

Summer Session, 1905,

HEBREW DEGREE CLASS.

PROFESSOR JAMES ROBERTSON, D.D., and THOMAS H. WEIR B.D.

Alexander M. M'Iver, M.A. } Equal.
Alexander R. Mackenzie, M.A. }

CHURCH HISTORY.

PROFESSOR JAMES COOPER, D.D.

I. JUNIOR CLASS.

1. Robert H. Napier, M.A., Dunblane.
2. Andrew C. Baird, M.A., B.Sc., Airdrie.
3. William N. Bell, M.A., Glasgow.
4. Stephen Forsyth, M.A., Sunderland.

SUBSEQUENT ORDER.

John Mercer Hunter, M.A., Ayr.
John M. Hay, M.A., Tarbert, Loch Fyne.
Thomas S. Glen, Paisley.

II. SENIOR CLASS.

1. John A. G. Thomson, M.A., Glasgow (Cleland and Rae-Wilson Gold Medal).
2. Gavin Lawson, M.A., Shettleston.
3. Robert C. Thomson, M.A., Glasgow.

SUBSEQUENT ORDER.

John Martin, M.A., Glasgow.
 Hector Cameron, Ibrox.
 Peter J. M'Iver, Stornoway.
 Angus J. M'Vicar, M.A., North Uist.
 Dugald M'Callum, M.A., Kintyre.

Faculty of Law.

SCOTS LAW.

PROFESSOR WILLIAM M. GLOAG, B.A.

I. For Eminence in Class Examinations:—

Prizemen.

1. James M'Intosh, M.A. (Robert Ross Prize).
2. Robert Browning, M.A.
3. James Robertson.
4. Douglas S. Dickson, M.A.
5. Robert Burns, M.A.

Honours.

6. William Pitcairn.
7. Robert Dickie, M.A.
8. Alexander Robertson,
9. Thomas D. K. Murray, M.A., B.Sc.
10. { George N. Morrison, B.A. } Equal.
 { John W. Stewart. }
12. William Fyfe.
13. { George C. Deuchers. } Equal.
 { James H. Risk. }
15. John M'Nay.
16. John N. Orr, M.A.
17. Harry F. Anderson.
18. John A. M'Connachie, M.A.
19. Norman Will.

II. For Eminence in Examination for Prizes given by the Faculty of Procurators in Glasgow:—

Prizemen.

1. Douglas S. Dickson, M.A.
2. James M'Intosh, M.A.
3. { Robert Browning, M.A. } Equal.
 { James H. Risk. }

Honours.

- | | |
|----------------------------------|----------------------------|
| 5. James Robertson. | 9. John. N. Orr, M.A. |
| 6. James Stevenson. | 10. { John M'Nay. } Equal. |
| 7. { Robert Burns, M.A. } Equal. | 12. William Pitcairn. |
| { George C. Deuchers. } | |

CONVEYANCING.

PROFESSOR JAMES MOIR, LL.D.

Prizemen.

1. William Pirie, Keith, Banffshire (Robert Ross Prize).
2. Jeffrey S. Craig, Coatbridge.
3. { John Barclay, Ardrossan.
 { David E. Drummond, Kilmarnock. }

Eminently Distinguished.

5. John Pirie, Cairney, Aberdeenshire.
6. James R. Lyons, Glasgow.
7. Arthur Muir, Greenock.
8. Alexander B. Boyd.

Examination for Prizes given by the Faculty of Procurators in Glasgow.

Prizemen.

1. { John Barclay.
 { William Pirie.
3. Arthur Muir.

Eminently Distinguished.

4. { Jeffrey S. Craig.
 { David E. Drummond.
6. James R. Lyons.

CIVIL (OR ROMAN) LAW.

Lecturer—JAMES M. IRVINE, LL.B., Advocate.

- | | |
|---|--|
| 1. *Charles E. P. White, M.A. | 8. David J. Wallace. |
| 2. *Thomas P. Simpson. | 9. Hugh D. Sempill, M.A. |
| 3. *James C. Burton, M.A. | 10. { Robert J. Cuthbert.
{ David M'Gill. |
| 4. Andrew Henderson, M.A. | 12. { William M. Lyle.
{ Alexander Mowat. |
| 5. { George S. Milne.
{ Arthur S. Wallace. | 14. John R. Blackwood, M.A. |
| 7. Henry G. B. Spens, M.A. | |

*The asterisk denotes the Prizemen.

PUBLIC INTERNATIONAL LAW.

Lecturer—A. H. CHARTERIS, LL.B.

First-Class Certificates.

1. Walter Hubbard, M.A. (First Prize).
2. { James L. Mackenzie, M.A. } Second Prize, Equal.
- { Morton M. Muir, M.A. }
3. Robert Burns, M.A.
4. James W. Millen, M.A.

INTERNATIONAL PRIVATE LAW.

Summer Session, 1905.

Lecturer—A. H. CHARTERIS, LL.B.

First-Class Certificates.

1. { James R. Lyons,
Robert P. Smith, M.A., } (Prizemen equal.)
2. Thomas P. Riddell, M.A.

Second-Class Certificates (in alphabetical order).

Alexander B. Boyd.
James A. Gilchrist, M.A.
Walter Henderson, M.A.
James W. Millen, M.A.

JURISPRUDENCE.

Lecturer—JAMES A. M'CALLUM, LL.B.

1. James M'Intosh, M.A. (First Prize).
2. James L. Mackenzie, M.A. (Second Prize).
3. Thomas D. K. Murray, M.A., B.Sc.
4. Morton M. Muir, M.A.
5. Douglas S. Dickson, M.A.

CONSTITUTIONAL LAW AND HISTORY.

Lecturer—WILLIAM S. McKECHNIE, LL.B., D.Phil.

Honours Class.

1. James Keith (Prize).
2. Henry G. B. Spens, M.A.

Ordinary Class.

1. { John R. Blackwood, M.A., } First Prize, Equal.
2. { Andrew D. Harcus,
3. David J. Wallace (Third Prize).
4. James R. Lyons (Fourth Prize).
5. { Robert M. Bernard, } Equal.
6. { John Talman,
7. { Robert Browning, M.A., } Equal.
8. { Tennant Sloan, M.A., }
9. John W. Taylor.
10. John W. Stewart.
11. { Robert W. Craig, } Equal.
12. { George P. Insh, }

MERCANTILE LAW.

Lecturer—WILLIAM SHAW.

Prizes.

1. William Beckett.
2. John R. Turnbull.
3. James R. Mackay.

Highly Distinguished.

- | | |
|--------------------------|--------------------------------|
| 1. James A. Henderson. | 8. Robert Montgomery. |
| 2. John Pirie. | 9. James G. Paterson. |
| 3. Robert T. Cunningham. | 10. Robert M. Grant, M.A. |
| 4. Robert C. Walker. | 11. William M. M'Culloch, M.A. |
| 5. James G. Farries. | 12. John Brown. |
| 6. Henry H. Fyfe. | 13. John MacRobert. |
| 7. John Goold. | 14. John R. Murray. |

FORENSIC MEDICINE.

PROFESSOR JOHN GLAISTER, M.D., D.P.H.(Camb.), F.R.S.E.

First-Class Certificates.

James L. Mackenzie, M.A. (Medallist).
 George R. Herbertson, M.A.
 Walter Hubbard, M.A.
 John N. Orr, M.A.

Second-Class Certificates.

Robert Dickie, M.A.
 John A. M'Connachie, M.A.

Faculty of Medicine.

MEDALS AND CERTIFICATES OF MERIT.

SURGERY.

PROFESSOR SIR WILLIAM MACEWEN, M.D., LL.D., D.Sc.(Oxon.), F.R.S.

First-Class Certificates.

- | | |
|---|------------------------|
| 1. William J. Rutherford (Medal). ½ | 4. David L. Tate. |
| 2. James R. Drever, M.A. | 5. Lawrence Storey. |
| 3. { Robert S. M'Kim, M.A.,
Peter Mitchell, M.A., } Equal. | 6. James K. Welsh. |
| | 7. Matthew J. Stewart. |

Commendation Certificates.

- | | |
|---|---|
| 1. Hugh J. Thomson. | 4. { Thomas B. Smith,
John Stevenson, } Equal. |
| 2. { Alister A. C. McNeill,
Charles A. Crichton, } Equal. | 5. { Hugh M. Wilson,
Thomas Barbour, B.Sc., } Equal. |
| 3. { John Anderson, M.A., B.Sc.,
William H. Manson, M.A., } Equal. | 6. { Matthew Young,
Morris Y. Young, } Equal. |

OPERATIVE SURGERY.

PROFESSOR SIR WILLIAM MACEWEN, M.D., LL.D., D.Sc.(Oxon.), F.R.S.

Summer Session, 1905.

First-Class Certificates.

- | | |
|---|------------------------|
| 1. James H. Baird, B.A. (Medallist). | 3. George A. Allan. |
| 2. { Duncan M'Ewan,
Daniel Stewart,
William A. Stuart, } Equal. | 4. George Young. |
| | 5. Charles S. Thomson. |
| | 6. James D. Kidd. |

Demonstrators.

Scott C. Adam.
 Andrew Allison.
 Robert W. Dale, M.A.
 Robert S. Dewar, M.A.
 John S. Dunn, M.A.
 Alexander B. Ferguson.
 Joseph Glaister.
 Alexander Graham, B.Sc.

William Grier.
 Arnold E. Jones.
 Hugh A. Macewen.
 William B. M. Martin.
 Cunison D. Rankin.
 James M. Renton.
 William Rolland.
 John Taylor.

Commendation Certificates.

- | | |
|--------------------|---------------------|
| 1. John Macintyre. | 3. Ralph V. Howell. |
| 2. James D. Hart. | 4. Henry S. Ranken. |

CLINICAL SURGERY.

PROFESSOR SIR WILLIAM MACEWEN, M.D., LL.D., D.Sc.(Oxon.), F.R.S.

Summer Session, 1905.

JUNIOR DIVISION.

First-Class Certificates.

- | | |
|-------------------------------|---------------------------|
| 1. Robert S. M'Kim, M.A. | 3. William J. Rutherford. |
| 2. John Anderson, M.A., B.Sc. | 4. Arthur M. Crawford. |

Commendation Certificates.

- | | |
|------------------------|----------------------------------|
| 1. John S. Clark, M.A. | 4. Robert N. Guthrie. |
| 2. James K. Welsh. | 5. Thomas M'Cririck, M.A., B.Sc. |
| 3. Harold W. Dempster. | 6. Ralph M. F. Picken. |

Certificates on Anaesthetics.]

William A. M'Kellar, M.

Henry S. Ranken.

John Taylor.

Winter Session, 1905-6.

JUNIOR DIVISION.

First-Class Certificates.

- | | | |
|---|---------------------------------------|---------------------|
| 1. Charles A. Crichton. | 3. Ralph M. F. Picken, B.Sc. (Medal). | 4. Hugh J. Thomson. |
| 3. { Matthew Young,
Thomas H. Campbell, } Equal. | 5. John V. Grant. | |

Commendation Certificates.

- | | |
|--|--|
| 1. { Donald I. M'Naughtan, } Equal. | |
| 2. { Lawrence Storey, } Equal. | |
| 3. { David Gibson, } Equal. | |
| 4. { Peter C. M'Arthur, M.A., } Equal. | |

SENIOR DIVISION.

First-Class Certificates.

- | | | |
|-------------------------|------------------------|----------|
| James K. Welsh (Medal). | Charles Burns, | } Equal. |
| Alister A. C. M'Neill. | Robert S. M'Kim, M.A., | |
| | Morris Y. Young, | |
| William R. Cammock, | | } Equal. |
| Hugh W. Moir, | | |

Commendation Certificates.

- | | | | |
|--------------------------|----------|----------------------|----------|
| 1. { Matthew J. Stewart, | } Equal. | 3. { Donald Duncan, | } Equal. |
| { James D. Kidd, | | { Robert N. Guthrie, | |
2. Thomas Winning, M.A.

Certificates on Anaesthetics.

John S. Clark, M.A.	William T. Hardie.
John C. Crawford.	Walter H. Kiep.
Charles A. Crichlow.	John Steedman.
Robert Donald.	Matthew J. Stewart.
William H. Duncan.	Matthew Young.

CLINICAL SURGERY.

PROFESSOR SIR HECTOR C. CAMERON, M.D.

Summer Session, 1905.

Certificates of Merit.

Matthew Young.	Campbell K. Stevenson.
John Cruikshank.	William C. Mackie.
Matthew J. Stewart.	William C. Gunn.
Andrew W. Anderson.	

Winter Session, 1905-6.

Medal—David A. Thomson, M.A.

First-Class Certificates.

John Fotheringham,	} Equal.	Archibald C. Munro,	} Equal.
Hugh F. Watson,		William C. Mackie,	

Second-Class Certificates.

John L. Boyd,	} Equal.
Joseph B. Mackay,	

PRACTICE OF MEDICINE.

PROFESSOR SIR THOMAS M'CALL ANDERSON, M.D.

SENIOR DIVISION.

Medal—William J. Rutherford.

First-Class Certificates (in order of Merit).

- | | |
|--------------------------|------------------------|
| 1. Thomas Barbour, B.Sc. | 4. William R. Cammock. |
| 2. John S. Clark, M.A. | 5. John Stevenson. |
| 3. James K. Welsh. | 6. Arthur M. Crawford. |

JUNIOR DIVISION.

Medal—James R. Drever, M.A.

First-Class Certificates (in order of Merit).

- | | |
|-------------------|---------------------|
| 1. Thomas Miller. | 3. James M'Farlane. |
| 2. David Manson. | 4. William Smellie. |

DEGREE AND PRIZE LIST.

CLINICAL MEDICINE.

PROFESSOR SIR THOMAS M'CALL ANDERSON, M.D.

Summer Session, 1905.

First-Class Certificates (in order of Merit).

SENIORS.

- | | | |
|-------------------------|------------------------------|----------|
| 1. James H. Baird, B.A. | 4. { John S. Dunn, M.A., } | } Equal. |
| 2. Andrew B. Aitken. | { James M. Renton, | |
| 3. William L. Kirkwood. | 5. William Grier. | |
| | 6. { William B. M. Martin, } | } Equal. |
| | { Alexander C. Russell, | |

JUNIORS.

- | | |
|--------------------------|----------------------|
| 1. Arthur N. R. M'Neill. | 2. Horatio Matthews. |
|--------------------------|----------------------|

Winter Session, 1905-6.

SENIOR DIVISION.

Medal—John Anderson, M.A., B.Sc.

First-Class Certificates (in order of Merit).

- | | |
|--------------------------|---------------------------|
| 1. Thomas Barbour, B.Sc. | 3. William J. Rutherford. |
| 2. John Stevenson. | 4. James H. Paul. |

JUNIOR DIVISION.

Medal—Peter R. M'Naught.

First-Class Certificates (in order of Merit).

- | | | |
|----------------------|---------------|-------------------------|
| 1. John Cruickshank. | 2. John Lang. | 3. William B. Brownlie. |
|----------------------|---------------|-------------------------|

CLINICAL MEDICINE.

PROFESSOR SAMSON GEMMELL, M.D.

Summer Session, 1905.

First-Class Certificates (in alphabetical order).

SENIORS.

- | | |
|-----------------------|----------------------|
| Thomas Barbour, B.Sc. | Peter Mitchell, M.A. |
| James Coutts. | James H. Paul. |
| Arnold H. Gray. | Campbell Ross. |
| Robert M. Macfarlane. | Alfred C. Sharp. |
| Robert May. | John Stevenson. |

JUNIORS.

- | | |
|----------------------|--------------------|
| Robert I. Binning. | Adam Patrick, M.A. |
| John M'Vittie. | William B. Watson. |
| William S. Melville. | Hugh M. Wilson. |

Winter Session, 1905-6.

SENIORS.

Medal—Arnold H. Gray.

First-Class Certificates (in alphabetical order).

William Gilfillan.	William Smellie.
William C. Gunn.	David L. Tate.
Peter Mitchell, M.A.	George H. Wilson.

JUNIORS.

Medal—William M. Elliott.

First-Class Certificates (in alphabetical order).

David Arthur, B.Sc.	Robert S. Taylor.
Arthur N. R. McNeill.	

MIDWIFERY.

PROFESSOR MURDOCH CAMERON, M.D.

Medallist—John Anderson, M.A., B.Sc.

First-Class Certificates (alphabetically arranged).

David Arthur, B.Sc.	Horatio Matthews.
John S. Clark, M.A.	James H. Paul.
James R. Craig.	John Steedman.
Arthur M. Crawford.	Lawrence Storey.

Second-Class Certificates (alphabetically arranged).

Andrew H. Arnott.	Robert Marshall.
William Brown, M.A., B.Sc.	John C. Middleton, M.A., B.Sc.
Thomas H. Campbell.	John M. Taylor.
Charles A. Crichtlow.	Charles S. Thomson.
Donald Duncan.	Hugh J. Thomson.
John M'Vittie.	

DISEASES OF WOMEN.

PROFESSOR MURDOCH CAMERON, M.D.

Summer Session, 1905.

Medallist—Robert Donald.

First-Class Certificates (alphabetically arranged).

Peter Maguire.	Alfred C. Sharp.
James H. Paul.	Thomas B. Smith.

Second-Class Certificates (alphabetically arranged).

Andrew B. Aitken.	Hugh A. Macewen.
Joseph Glaister.	David L. Tate.

INSANITY.

Lecturer—DAVID YELLOWLEES, M.D., LL.D.

Summer Session, 1905.

1. Mackintosh Bursary—

William Brown, M.A.,	} Equal.
John C. Middleton, M.A.,	

First-Class Certificates.

Matthew Young.
John Smith, M.A.

Robert Govan.

Second-Class Certificates.

John M'Vittie.
Jeannie M. Andrew.
Jessie D. Rankin, M.A., B.Sc.George M. Fraser.
Matthew J. Stewart.

DISEASES OF THE EAR.

Lecturer—THOMAS BARR, M.D.

Summer Session, 1905.

Prizes.

William Smellie.

James K. Welsh.

First-Class Certificates.

Andrew H. Arnott.
Peter Mitchell, M.A.
John Stevenson.John Stewart, M.A.
Charles S. Thomson.*Winter Session, 1905-6.*

Prizes.

Samuel Wilson, M.A.

Matthew Young.

First-Class Certificates.

Donald Duncan.
William C. Gunn.Thomas B. Smith.
Matthew J. Stewart.

DISEASES OF THE THROAT AND NOSE.

Lecturer—JAMES WALKER DOWNIE, M.B.

Summer Session, 1905.

First-Class Certificates (in order of merit).

Thomas Barbour, B.Sc.,	} Equal.
James W. Georgeson,	
William Smellie,	

William H. Manson, M.A.,	} Equal.
John Stevenson,	
George H. Wilson.	

Second-Class Certificates (in order of merit).

Henry H. Christie.
Frederick G. Robertson.
John Stewart, M.A.
John A. Doctor.William A. Campbell.
Thomas M. Watt.
Samuel N. Galbraith.

Winter Session, 1905-6.

First-Class Certificates (in order of merit).

Matthew J. Stewart,	} Equal.	Andrew J. Hutton.	} Equal.
Matthew Young,		Samuel Wilson, M.A.	
William C. Gunn.		James D. Kidd,	
Thomas L. Craig.			

Second-Class Certificates (in order of merit).

Archibald Hogg.	David Arthur, B.Sc.
James Coutts.	John M'Vittie.

PATHOLOGY.

PROFESSOR ROBERT MUIR, M.A., M.D.

Medallist—Thomas Miller.

First-Class Certificates (in order of merit).

1. Thomas Miller.	5. Hugh J. Thomson.	
2. Lawrence Storey.	6. { Robert Govan,	} Equal.
3. { Matthew J. Stewart,	{ Isaac Papiermeister,	
{ Matthew Young,		

Second-Class Certificates (in order of merit).

8. John C. Middleton, M.A., B.Sc.	15. { Alexander W. Eadie,	} Equal.
9. { Archibald Hogg,		
{ Alexander Scott,		
11. Thomas H. Campbell.		
12. { William C. Gunn,	16. { Alexander J. Couper,	} Equal.
{ James R. Craig,	{ Arthur N. R. M'Neill,	
{ James H. Martin,		

PRACTICAL PATHOLOGY.

PROFESSOR ROBERT MUIR, M.A., M.D.

Summer Session, 1905.

Medallist—Alexander T. I. Macdonald.

First-Class Certificates (in order of merit).

1. Alexander T. I. Macdonald.	4. Lawrence Storey.
2. Hugh J. Thomson.	5. David A. Thomson, M.A.
3. John M. Smith.	

Second-Class Certificates (in order of merit).

6. { Wallace W. Adamson,	12. { Donald Duncan,	} Equal.
{ Berkeley Gale,	{ John C. Middleton, M.A.,	
8. { John Stewart, M.A.,	{ Thomas Miller,	} Equal.
{ Matthew J. Stewart,	15. William Brown, M.A.	
10. { Charles A. Crichtlow,	{ Alexander J. Couper,	} Equal.
{ William M. Elliott,	{ Arthur N. R. M'Neill,	
	{ John W. Miller,	

MEDICAL JURISPRUDENCE AND PUBLIC HEALTH.

PROFESSOR JOHN GLAISTER, M.D., D.P.H. (Camb.), F.R.S.E.

Summer Session, 1905.

First-Class Certificates (in order of merit).

- | | | |
|-------------------------------|-----------------------------|----------|
| 1. Thomas Miller—Medallist. | 7. { Charles A. Crichlow, } | } Equal. |
| 2. Robert Govan. | { Horatio Matthews, } | |
| 3. David A. Thomson, M.A. | { Hugh J. Thomson, } | |
| 4. John Anderson, M.A., B.Sc. | 8. Matthew J. Stewart. | |
| 5. Lawrence Storey. | 9. George M. Fraser. | |
| 6. Matthew Young. | | |

Second-Class Certificates (in order of merit).

- | | | | | | |
|-------|-----------------------|----------|------------------------------|------------------------|----------|
| 10. { | David Arthur, B.Sc., | } Equal. | 11. { William Brown, M.A., } | } Equal. | |
| | Thomas H. Campbell, | | { Hugh Morton, | | |
| | John W. Miller, | | } Equal. | 12. { Donald Duncan, } | } Equal. |
| | Donald I. M'Naughtan, |  |  |  |  | { James H. Martin, } |
| | Patrick O'Brien, | | | | |

ANATOMY.

PROFESSOR JOHN CLELAND, M.D., LL.D., D.Sc., F.R.S.

SENIORS.

Medal—John Lang.

First-Class Certificates.

- | | |
|------------------|----------------------|
| Neil C. Scott. | Robert M. Walker. |
| William A. Muir. | Josiah S. Harbinson. |
| Hugh C. Storrie. | |

Second-Class Certificates.

- | | |
|-------------------------------|-------------------------|
| William B. Brownlie, } Equal. | David Anderson. |
| | William W. Rorke. |
| | John Allan, |
| | James Carrick, } Equal. |
| Arthur Turnbull, M.A., } | |
| William L. Forsyth. | |
| Morris W. Broudy. | |

JUNIORS.

Medal—William Howat, M.A.

EMBRYOLOGY.

Lecturer—JAMES F. GEMMILL, M.A., M.D.

Summer Session, 1905.

First-Class Certificates (in order of merit).

- | | |
|-------------------------------|----------------|
| 1. Peter R. M'Naught (Prize). | 3. John Allan. |
| 2. John Cruickshank. | |

Second-Class Certificates (in order of merit).

- | | | |
|----------------------|----------------------------|----------|
| 1. William W. Rorke. | 4. { William Hamilton, } | } Equal. |
| 2. Neil C. Scott. | { Arthur Turnbull, M.A., } | |
| 3. John W. M'Nee. | | |

EMBRYOLOGICAL LABORATORY.

First-Class Certificate.

William Brown, M.A.

PHYSIOLOGY.

PROFESSOR JOHN GRAY M'KENDRICK, M.D., LL.D., F.R.S.

John Hunter Medal and First-Class Certificate.

William M'Adam, M.A.

First-Class Certificates.

James B. Galbraith.	Robert W. Sutherland.
David C. Suttie, } Equal.	William Rutherford.
James L. Ure, }	George Macleod, M.A.
Charles Duguid, M.A.	Andrew C. Anderson.
John A. M. Cameron, } Equal.	James K. Dunlop, M.A., } Equal.
Hyacinth B. W. Morgan, }	Hugh G. Robinson,

Second-Class Certificates.

James Harper.	Robert Gale.
William H. S. Armstrong.	Morris W. Broudy.
William Howat, M.A., } Equal.	Thomas Marlin,
Douglas Young,	John W. M'Nee, } Equal.
Crawford Lundie.	William W. Rorke, }
John Granger.	

PRACTICAL PHYSIOLOGY.

PROFESSOR JOHN GRAY M'KENDRICK, M.D., LL.D., F.R.S.

Summer Session, 1905.

John Hunter Medal and First-Class Certificate.

William B. Brownlie.

First-Class Certificates.

John Cruickshank.	Peter R. M'Naught.
Adam Patrick, M.A.	

Second-Class Certificates.

Frank N. Marsh, } Equal.	Robert D. B. Frew, }
Thomas E. Gray, }	William L. Forsyth, } Equal.
Benjamin Hutchison.	Archibald C. Munro, }
James W. M'Leod, }	
John W. M'Nee, }	
Alfred Roemmele, }	

ADVANCED PRACTICAL PHYSIOLOGY.

Winter Session, 1905-6.

John Hunter Medal and First-Class Certificate.

John Fotheringham.

First-Class Certificate.

Arthur Turnbull, M.A.

Second-Class Certificates.

William R. Cooper.	William Hamilton.
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MATERIA MEDICA AND THERAPEUTICS.

PROFESSOR RALPH STOCKMAN, M.D.

First-Class Certificates (in order of Merit).

Peter R. McNaught—(Medal).

Benjamin Hutchison.

Adam Patrick, M.A.

Ralph M. F. Picken, B.Sc.

John Cruickshank.

Second-Class Certificates (in order of Merit).

William Barr.

William Anderson,

John Lang.

Robert M. Morison, M.A., } Equal.

James M. McMillan.

Archibald C. Munro,

Hugh C. Storrle.

Arthur D. Downes, M.A.

Neil C. Scott.

Walter H. Kiep, } Equal.

Robert M. Walker.

Robert R. Bow, }

PRACTICAL PHARMACY.

PROFESSOR RALPH STOCKMAN, M.D.

Summer Session, 1905.

First-Class Certificates.

Thomas D. C. Ross—(Medal).

William McAdam, M.A.

Second-Class Certificates.

Hugh C. Storrle.

Martin P. Thomas, B.A.

Hugh M. Gossman.

Robert M. Walker.

John Allan.

John Cruickshank.

Arthur Turnbull, M.A.

Donald Stewart.

John Blakely.

BOTANY.

PROFESSOR F. O. BOWER, Sc.D., F.R.S.

Summer Session, 1905.

SYSTEMATIC.

Medal and First-Class Certificate.

James L. Ure.

Second-Class Certificates.

James M. Scott.

Charles L. Sutherland,

Douglas Young.

Andrew C. Anderson, } Equal.

Malcolm A. Macdonald, } Equal.

David T. C. Frew,

William A. Powicke,

Robert B. F. McKail,

Robert D. Goldie, } Equal.

James Thomson,

Robert C. Davie,

Donald Fisher,

John P. Mathie, }

James Hendry,

Andrew H. Clark,

} Equal.

PRACTICAL.

Second-Class Certificates.

Archibald Taylor. Douglas Young. Malcolm A. Macdonald.

HERBARIUM PRIZE AND SECOND-CLASS CERTIFICATE.

William M. Buchanan.

Mr. Buchanan's Herbarium contained 416 species, correctly named.

ZOOLOGY.

PROFESSOR JOHN GRAHAM KERR, M.A.

SYSTEMATIC.

First-Class Certificates (in order of merit).

David T. C. Frew (Medal).	Crawford Lundie.
Malcolm A. Macdonald.	Daniel W. Ritchie.
Thomas J. Mackie.	Andrew M'Vittie.
James Hendry.	Robert H. Deans.
John M. Scott, M.A.	George R. Spence.
James T. Dick.	

Second-Class Certificates (in alphabetical order).

Robert B. Bain.	John Mitchell.
William G. Clark.	Andrew R. Muir.
James Dunlop, M.A.	James M. Scott.
James Findlay.	Joseph H. N. F. Savy.
Ian Macdonald.	Harold E. Whittingham.

PRACTICAL.

Medal and Special Prize—Harold E. Whittingham.

First-Class Certificates (in alphabetical order).

Alexander Fraser. Andrew R. Muir.

Second-Class Certificates (in alphabetical order).

Charles Auld	Ralph Millen.
James A. S. Burges.	Thomas Paterson.
Crawford Lundie.	Arthur S. Richmond.
Donald C. Macdonald.	William Sneddon.
Malcolm A. Macdonald.	Gilbert I. Strachan.
Alastair Macintyre.	Herbert M. Williamson.
Osborne H. Mavor.	George J. Wilson.

ADVANCED CLASS.

Summer Session, 1905.

Second-Class Certificates.

William M'Adam, M.A. William Howat, M.A.
James B. Galbraith.

Winter Session, 1905-6.

Medal and First-Class Certificate.

William M'Adam, M.A.

Second-Class Certificates (in alphabetical order).

Robert R. Archibald.	Daniel W. Ritchie.
Andrew M'Vittie.	Muriel Robertson, M.A.

PHYSICS.

PROFESSOR ANDREW GRAY, M.A., LL.D., F.R.S., and
GEORGE W. WALKER, M.A.

Summer Session, 1905.

First-Class Certificates (in order of merit).

Andrew C. Anderson,	} Medallists.	William G. Clark.
Allan Hamilton,		Robert Gilchrist.
John Gibson,	} Equal.	James M. Scott.
Robert D. Goldie,		David T. C. Frew.
John M. Scott, M.A.,	} Equal.	Kenneth C. G. Gray.
Thomas Hyslop,		James T. Dick.
Robert B. F. M'Kail,	} Equal.	Hyacinth B. W. Morgan.
Douglas Young,		William Masterton.
Charles L. Sutherland.		Donald Fisher.
Arthur F. Stewart,	} Equal.	
John P. Mathie,		

Second-Class Certificates (in alphabetical order).

William S. Alexander.	Bentley M. Hunter.	Charles M. Nicol.
Alexander Baird.	Alexander Leishman.	Richard R. K. Paton.
Andrew H. Clark.	William T. Lindsay.	Arthur Poole.
Peter Drummond.	Malcolm A. Macdonald.	George R. Spence.
James Findlay.	Donald M'Intyre.	Richmond Steel.
Pietro Giuliani.	Campbell Macmillan.	David C. Suttie.
Edward G. Glover.	John H. M'Nicol.	Robert Sweet.
Albert W. Gregorson.	Angus Millar.	Aidan G. W. Thomson.
William H. Howat.	William Niccol.	John Y. Wood.

CHEMISTRY.

PROFESSOR JOHN FERGUSON, M.A., LL.D., F.S.A.

Joseph Black Medal and George Roger Muirhead Prize.

Daniel W. Ritchie, } Equal.
John M. Strang, }

First-Class Certificates.

James Dunlop, M.A.	Daniel W. Ritchie.
	John M. Strang.

Second-Class Certificates.

David T. C. Frew.	David M'Adam.
Allan B. Hamilton.	Malcolm A. Macdonald.
John A. Hodge.	Thomas J. Mackie.
Allan W. Izat.	John Mitchell.
James Kirkland.	Charles L. Sutherland.

ORGANIC CHEMISTRY.

Lecturer—T. S. PATTERSON, PH.D.

First-Class Certificate.

Alexander S. Small.

Second-Class Certificates.

John M. Scott, M.A.	Daniel W. Ritchie.
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Faculty of Science.

METALLURGICAL CHEMISTRY.

Lecturer—CHARLES E. FAWSITT, D.Sc., PH.D.

Summer Session, 1905.

Certificates of Merit (arranged alphabetically).

Arthur J. Berry.	Andrew M'Millan, M.A.
Andrew Donald.	Andrew E. Struthers.
Frank W. Fairlie.	David Thomson, M.A.
Andrew Henderson, M.A.	Edward V. A. Willett.

Winter Session, 1905-6.

CLASS A.

Certificates of Merit (arranged alphabetically).

Andrew Donald, M.A.	David P. M'Donald, M.A.
Frank W. Fairlie.	Andrew M'Millan, M.A.
Andrew Henderson, M.A.	Andrew E. Struthers.

CLASS B.

Certificates of Merit.

John Kaye.	Alexander S. Small.
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PHYSICAL CHEMISTRY.

Lecturer—FREDERICK SODDY, M.A.

Certificates with Distinction.

LECTURES.

Andrew Henderson, M.A.	William B. M. Martin, M.B.
------------------------	----------------------------

PRACTICAL.

Alexander S. Small.	Andrew M'Millan, M.A.
	David P. M'Donald, M.A.

GEOLOGY.

PROFESSOR JOHN W. GREGORY, D.Sc., F.R.S.

PART I.

First-Class Certificates.

Allan Kirkwood (Medal).	David P. M'Donald, M.A.
Thomas Lindsay.	Robert Boyle.
James C. Wilson.	

Second-Class Certificates.

William J. C. Laurie, M.A.	George M. O. Barclay.
Alexander G. G. Guthrie.	Thomas W. Chalmers.
Thomas M. MacRobert, M.A., B.Sc.	Maggie M. J. Sutherland.

PART II.

Second-Class Certificates.

Helen M. Armour, M.A.	Renwick H. Leitch, M.A.
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ASTRONOMY.

PROFESSOR LUDWIG BECKER, PH.D.

Class Prize.

George D. C. Stokes, M.A.

ENGINEERING.

PROFESSOR ARCHIBALD BARR, D.Sc., M.Inst. C.E.

George Harvey Prize.

George H. Stevenson, Saltcoats.

Walker Prizes.

- | | |
|-------------------------------------|------------------------------|
| 1. George H. Stevenson. | 2. William H. Young, Glasgow |
| 3 and 4. { Andrew N. Aikman, Leith, | } Equal. |
| { Andrew T. Clark, Glasgow, | |

Muir Bursaries.

{ James Barr, Kilmarnock.
{ Thomas B. Maxwell, Falkirk.

CLASS IV.

- | | |
|----------------------------------|---------------------|
| 1. George H. Stevenson. | 2. Andrew T. Clark. |
| 3. William C. Crockatt, Glasgow. | |

Next in order.

Thomas A. Andrew, Kilmarnock,	} Equal.
George Pate, Carron,	

CLASS III.

- | | | | |
|-----------------------------|----------|------------------|----------|
| 1. { Andrew T. Clark, | } Equal. | 3. { James Barr, | } Equal. |
| { Samuel H. Dunlop, Odessa, | | { George Pate, | |

Next in order.

William C. Crockatt.

Thomas B. Maxwell.

CLASS I.

- | | | |
|----------------------|----------|----------------------|
| 1. { James Barr, | } Equal. | 3. Samuel H. Dunlop. |
| { Thomas B. Maxwell, | | |

Next in order.

Hugh Jack, Uddingston.

David Thomson, Aberdeen.

ENGINEERING DRAWING AND DESIGN SENIOR CLASS.

- | | |
|-------------------------------------|----------|
| 1. { Alex. S. Ritchie, Dunfermline, | } Equal. |
| { Andrew M. Wallace, Oxford, | |
| 3. George H. Stevenson. | |

Next in order.

Thomas A. Andrew,	} Equal.
William C. Crockatt,	
Alex. MacLaren, Motherwell,	} Equal.
Andrew I. Nicholson, Creetown,	

ENGINEERING DRAWING AND DESIGN—JUNIOR CLASS.

1. Thomas B. Maxwell. 2. Hugh Jack. 3. James Barr.

Next in order.

Sebastian G. M. Ure, Glasgow. Alexander G. G. Guthrie, Govan.
Samuel H. Dunlop.

ENGINEERING LABORATORY—SENIOR.

William C. Crockatt,
George H. Stevenson,
George Pate,
Harold E. Sheardown, Hull, } Equal.

ENGINEERING LABORATORY—JUNIOR.

1. John L. Ewan, London. 2. { Thomas B. Maxwell,
William Pate, Carron, } Equal.

Next in order.

Hugh Jack,
Sebastian G. M. Ure, } Equal.

ELECTRICAL ENGINEERING.

Lecturer—JOHN S. NICHOLSON, B.Sc.

JUNIOR CLASS.

1. Andrew N. Aikman. 3. { Thomas B. Maxwell,
George Pate, } Equal.
2. Andrew I. Nicholson.

Andrew T. Clark.
Hugh Jack.

SENIOR CLASS.

1. { Andrew N. Aikman,
George H. Stevenson, } Equal. Henry R. Climie.
William C. Crockatt.

MINING ENGINEERING.

Lecturer—CHARLES LATHAM, M.Inst. M.E.

CLASS I.

1. Henry C. Harris.
2. { Andrew K. M'Cosh,
William H. M'Millan, } Equal.
3. Kenneth L. Galloway.

CLASS II.

1. George Millar. 2. Thomas N. Dewar.

CLASS III.

1. Robert A. Hunter.

NAVAL ARCHITECTURE, INCLUDING MARINE ENGINEERING.

PROFESSOR J. H. BILES, Mem. Counc. I.N.A., M.I.C.E., LL.D.

Kirk Memorial Prize.

John A. Henderson.

SENIOR CLASS.

Jack Corbu.

JUNIOR CLASS.

William Thomson.

DRAWING CLASS.

Archibald L. Fleming.

Faculty of Arts.

HISTORY.

PROFESSOR DUDLEY J. MEDLEY, M.A.

ORDINARY CLASS.

Prizes.

- | | |
|-------------------------------|---------------------------|
| 1. Janetta I. W. Mackie. | 5. John J. Dempster, M.A. |
| 2. John Talman. | 6. James A. Gordon. |
| 3. { William M'Nicol } Equal. | 7. Daniel G. Baine. |
| { James R. Brown } | 8. Samuel F. Hunter. |

Certificates.

- | | |
|-------------------------|--------------------|
| 1. Arthur H. Dunnett. | 4. Anna B. Irving. |
| 2. Malcolm Manson. | 5. John Wilson. |
| 3. Thomas M. A. Macnab. | |

MATHEMATICS.

PROFESSOR WILLIAM JACK, M.A., LL.D., D.Sc.

ADVANCED HONOURS.

- | | |
|--|-------------------------|
| 1. Elizabeth G. Morrison, | } Second Year Students. |
| 2. David N. Strathie, | |
| John Jackson (Cunningham Gold Medal) First Year Student. | |

First-Class Certificates.

- | | |
|------------------|------------------|
| George Anderson. | James Paul, M.A. |
| Robert Ferguson. | James R. Brown. |

INTERMEDIATE HONOURS (DIVISION A):

- | | |
|---------------------|------------------------|
| 1. Robert Gibson. | 3. Alexander S. Small. |
| 2. Dorothy G. Reid. | |

First-Class Certificates.

- | | |
|-------------------------|------------------------|
| Elizabeth P. Hogg. | Harvey H. Montgomerie. |
| Malcolm Littlejohn. | James Miller, M.A. |
| Janet M'Cabe. | Jane A. Clanachan. |
| David P. M'Donald, M.A. | Alexandrena Carswell. |

INTERMEDIATE HONOURS (DIVISION B).

- | | |
|---------------------------------|----------------|
| 1. ¹ John M. Strang. | 3. James Barr. |
| 2. Samuel H. Dunlop. | |

First-Class Certificate.

John Hodge.

GRADUATING CLASSES.

- | | |
|----|---|
| 1. | ² Caleb A. Stewart (12 o'clock class). |
| 2. | William Y. Colquhoun (12 o'clock class). |
| 3. | John Noble (12 o'clock class). |
| 4. | George C. Hutton (12 o'clock class). |
| 5. | Robert E. Gray (9 o'clock class). |
| 6. | Bryce K. N. Wyllie (12 o'clock class). |
| 7. | { Annie K. Neill (Queen Margaret class). |
| | { Thomas Neilson, M.A. (9 o'clock class). |

First-Class Certificates.

Jane Hamilton (Queen Margaret class).
 Alexander R. Brown (12 o'clock class).
 John M. Gray (9 o'clock class).
 Donald C. Smith (9 o'clock class).
 { John V. M'Lean (9 o'clock class).
 { James C. Ross (9 o'clock class).
 Thomas W. Chalmers (12 o'clock class).
 William Thomson (12 o'clock class).
 William M. Balfour (12 o'clock class).
 Minnie F. Smith (Queen Margaret Class).

Summer Session, 1905.

Lecturers—DAVID K. PICKEN, M.A., and ROBERT J. T. BELL, M.A., B.Sc.

Prizes.

Thomas C. Gibson.	Alexander C. Grant.
-------------------	---------------------

First-Class Certificates.

Margaret Gordon.	Louis C. Phillips.
------------------	--------------------

NATURAL PHILOSOPHY.

PROFESSOR ANDREW GRAY, M.A., LL.D., F.R.S.

HIGHER CLASS. SECTION A.

Summer Session, 1905.

- | | |
|-------------------------|-------------------------|
| 1. Thomas M. MacRobert. | 2. George D. C. Stokes. |
|-------------------------|-------------------------|

Winter Session, 1905-6.

First-Class Certificates.

{ Elizabeth G. Morison (Prize).	John H. Brightman.
{ David N. Strathie (Prize).	James Paul, M.A.
Alexander D. Ross.	Walter Brown.
James R. Brown.	Alfred I. Steven.
Hugh Smith.	

¹ Mr. Strang obtains the Senior Muir Bursary in Mathematics.² Mr. Stewart obtains the Junior Muir Bursary in Mathematics.

HIGHER CLASS. SECTION B.

First-Class Certificates.

David B. Meek (Prize).	Robert Ferguson.
James Paul, M.A. (Prize).	George Anderson.
David N. Strathie.	James M. Mackintosh.
Elizabeth G. Morison.	John H. Brightman.
Henry R. Climie.	Walter Brown.
Andrew T. Clark.	John Lambie, M.A.
George H. Stevenson.	

ORDINARY CLASS.

Prizes.

1. John Jackson (Cleland Gold Medal).
2. John M. Strang.
3. William Paterson.
4. Robert Gibson.
5. David M'Adam.
6. Edward S. Russell.
7. Nathaniel Martin.

First-class Certificates (in alphabetical order).

Daniel D. Baird.	Janet M'Cabe.
John S. Boyd.	William H. M'Millan.
David Carson.	Peter M'Neish.
Thomas W. Chalmers.	John M. Martin.
Robert Frew.	Nathaniel Martin.
John Gibson.	Marion Muir.
Robert Gibson.	William Paterson.
John A. Hodge.	Edward S. Russell.
Thomas Hyslop.	Joseph W. Sommerville.
Allan W. Izat.	John M. Strang.
John Jackson.	John F. Thomson.
James Kirkland.	Nigel G. Watt.
Mary W. Lang.	Harold G. Wigg.
David M'Adam.	Annie Yuill.

PHYSICAL LABORATORY.

Summer Session, 1905.

First-Class Certificates (in alphabetical order).

ORDINARY COURSE.

Frank S. Easton.	James Paul, M.A.
John Frew, M.A.	Alexander S. Small.
Janet G. M'Gown.	Sebastian G. M. Ure.
Margaret B. Moir.	

ADVANCED COURSE.

Alexander Macdonald.	Alexander D. Ross.
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COURSE FOR KING'S STUDENTS.

Alexander Russell.

Winter Session, 1905-6.

ORDINARY COURSE.

Prize—John M. Strang.

First-Class Certificates (in alphabetical order).

Daniel D. Baird.	John M. Martin.
George Barrett.	Sigurd S. Möller.
Robert Boyle.	Berry Preston.
Archibald H. Brown.	Joseph W. Sommerville.
Frank H. Bruges.	David Thomson.
Alexandrena Carswell.	Harry H. Vaughan.
Thomas W. Chalmers.	Nigel G. Watt.
Allan W. Izat.	Harold G. Wigg.
James Kirkland.	

HALF-SESSION STUDENTS.

Robert Frew.	Alexander S. Small.
James Paul, M.A.	Ralph S. Weir, M.A.
Guy A. Peck.	

ADVANCED COURSE.

Neil M'Arthur, M.A.

ELECTRICITY, PURE AND APPLIED.

Lecturer—JAMES MUIR, D.Sc., M.A.

First-Class Certificates.

1. George H. Stevenson (Prize).
2. Charles L. Laing.

LOGIC AND METAPHYSICS.

PROFESSOR ROBERT LATTA, M.A., D.Phil.

ORDINARY CLASS.

Prizes.

- | | |
|------------------------------------|--------------------------------|
| 1. David B. Meek (Buchanan Prize). | 6. Andrew Paterson. |
| 2. Herbert J. Paton. | 7. Hugh A. Keyburn. |
| 3. Charles Cameron. | 8. Christian W. M'Nabb. |
| 4. Anna B. Irving. | 9. Catherine Lindsay. |
| 5. James Rossie Brown. | 10. Thomas Smith (Cambuslang). |

First-Class Certificates of Merit.

Matthew U. Baird.	Peter C. Millar.
John Brown.	John R. Peddie.
William Y. Colquhoun.	Agnes H. Rankin.
John E. Davidson.	Robert F. Rattray.
Robert C. Davie.	William Sim.
¹ Alexander B. Harper.	Donald Stalker.
Janet F. Kellie.	Campbell Stephen.
Donald Leggat.	Jane B. Stewart.
Roger G. M'Dowall.	William Thomson.

¹Mr. Harper was ninth in the order of merit, but as he had attended the class in Session 1904-5, he was ineligible for prizes.

MORAL PHILOSOPHY.

PROFESSOR HENRY JONES, M.A., LL.D., D.Litt., F.B.A.

HONOURS CLASS.

1. James Cunnison (Edward Caird Medal and Mrs. John Caird's Prize of Three Guineas).
2. Andrew Templeton, M.A. (Mrs. John Caird's Prize of Two Guineas).

Mrs. John Caird's Prize of Five Guineas for Summer work.

James Cunnison,)
 George R. Robertson, } Equal.

ORDINARY CLASS.

Prizes and First-Class Certificates of Merit for General Eminence in the Essays, Exercises and Examinations of the Class.

- | | |
|---|-------------------------|
| 1. Leonard J. Russell, M.A. (Buchanan Prize). | 5. James Stewart. |
| 2. John S. Boyd. | 6. Jessie D. Borthwick. |
| 3. Samuel F. Hunter. | 7. Murray Macgregor. |
| 4. Jane P. Young. | 8. Hugh A. Reyburn. |

First-Class Certificates of Merit (in alphabetical order).

Peter Allan.	Edward S. Russell.
Jemima Barrie.	Jane B. Stewart.
Alexander C. Grant.	William Wallace.
Lily Ross.	Alexander T. R. Yuille.

The Prize of Five Guineas, given by Mrs. John Caird for Excellence in the Essays was awarded to

1. Leonard J. Russell, M.A.
2. John S. Boyd.

The Lanfine Bursary was awarded to
 Leonard J. Russell, M.A.

POLITICAL PHILOSOPHY.

Lecturer—ROBERT A. DUFF, M.A., D.Phil.

First-Class Certificates (in order of merit).

Archibald A. Campbell, M.A.	William M'Kelvie.
Andrew Templeton, M.A.	Arthur E. Macgregor, M.A.
George R. Robertson.	

POLITICAL ECONOMY.

PROFESSOR WILLIAM SMART, M.A., LL.D., D.Phil.

THE ALEXANDER SMART MEMORIAL PRIZE of £10 in Books.
 John M'Whan.

CLASS PRIZES.

1. { James B. Galbraith, } Equal.
 { John M'Whan, }
3. William Kennedy.
4. { Archibald A. Bowman, M.A., } Equal.
 { James Cunnison, }
 { Donald Stalker, }
7. { Charles Cameron, } Equal.
 { Isabella U. Nelson, }

Proxime accesserunt.

Bruce B. Blackwood.	Renwick H. Leitch, M.A.
John R. Blackwood, M.A.	Mary Maben.
Jean W. Bow.	Robert A. C. Macmillan, M.A.
William King.	James T. Smith.

EDUCATION.

Lecturer—JOHN CLARK, M.A.

Prizes.

1. { James Cunnison, } Equal.
 { Jane Hamilton, }
3. { Elize R. Stevenson, } Equal.
 { Mary C. Waddell, }
5. Katharine T. M'Millan, M.A.
6. { Isabel M. Milligan, M.A., } Equal.
 { Ethelreda Hutchinson, }
 { Annie M. Macgregor, M.A., }
9. { Jessie D. Borthwick, } Equal.
 { Annie Thomson, M.A., }
 { Margaret S. M'Leod, }

First-Class Certificates of Merit.

1. { Janet Dodd, } Equal.
 { Agnes C. P. Thomson, }
 { John Donaldson, }
4. { Helen E. Fair, } Equal.
 { Kate M. Macintyre, }
 { Janet I. Macphail, M.A., }
7. { Mary L. Hutton, } Equal.
 { Walter M. MacCulloch, M.A., }
 { Ada M. W. Renwick, }
10. Jane Simpson.
11. Constance May.

Essay Prizes.

James Cunnison,	} Equal.
Katharine T. M'Millan, M.A.,	

Proxime Accesserunt.

Isabel M. Milligan, M.A.,	} Equal.
Agnes C. P. Thomson,	

Honourable Mention.

Eliza R. Stevenson.	Ada M. W. Renwick.
Muriel G. Lindsay, M.A.	Mary C. Waddell.
Mary O. N. Armour.	

HUMANITY.

PROFESSOR GEORGE G. RAMSAY, M.A., LL.D., Litt. Doc.

Prizes for General Excellence in the work of the Session.

HONOURS CLASS, 1 P.M.

Muirhead Prizes.

1. Alexander D. Hodge, Glasgow (Dumbarton Academy).
2. David Millar, Drongan, Ayrshire (Ayr Academy).
3. James M'Kelvie, Strone, Argyllshire (Glasgow High School).

SENIOR CLASS, 8 and 9 A.M., AND QUEEN MARGARET COLLEGE.

The Cowan Gold Medal.

Bryce K. N. Wyllie, Caerlaverock, Dumfriesshire (Dumfries Academy).

Ordinary Prizes.

2. Hector J. W. Hetherington, Tillicoultry (Dollar Institution).
3. John M. Short, Stirling (Stirling High School).
4. Ruth E. Marwick, Glasgow (Hillhead High School).
5. James Porter, Glasgow (Whitehill Higher Grade School).
6. Robert Thomson, Kilmarnock (Kilmarnock Academy).
7. Margaret E. Taylor, Paisley (The Park School, Glasgow).
8. { Annie I. Henderson, Glasgow (The Park School, Glasgow).
- { John V. M'Lean, Glasgow (Pupil Teachers' Institute).

Prizes for Latin Prose Composition.

Section I. *a*.

1. Francis M. Smith, Glasgow (Glasgow High School).
2. Henry I. Cunningham, Muirkirk (Ayr Academy).

Section I. *b*.

Adam W. Burnet, Cambuslang (Glasgow High School).

Section II.

John O. Taylor, Paisley (Glasgow Academy).

VACATION EXERCISES.

1. For Latin Essay upon the Greek and Modern Theories of Education.

Henry I. Cunningham, Muirkirk (Ayr Academy).

2. For repetition of Horace, Odes III.

Equal, { Wallace M. Conley, Campbeltown (Campbeltown Grammar School).
 { George Murray, Milngavie (Pupil Teachers' Institute, Glasgow).
 { Francis M. Smith, Glasgow (Glasgow High School).

LATIN BLACKSTONE EXAMINATION.

Cowan Gold Medal.

Robert Gibson, Glasgow (Glasgow High School).

Distinguished.

Herbert J. Paton, Glasgow (Glasgow High School).

Summer Session, 1905.

Lecturer—ROBERT G. NISBET, M.A.

Prizes.

1. Petrina Stewart.
2. { George Campbell, } Equal.
 { William B. Henderson, }

GREEK.

PROFESSOR JOHN S. PHILLIMORE, M.A.

HONOURS CLASS (First Year only).

First-Class Certificates (in order of merit).

Thomas N. M'Iravey (Scott-Macfarlan Gold Medal).	
Alexander D. Hodge (First Prize).	Eric D. Macgregor.
Thomas Beaumont.	Herbert I. Paton.
	David Millar.

Prize for Essay.

Roger G. M'Dowall.

Prizes for Prose.

- | | |
|------------------------|------------------------|
| 1. Thomas N. M'Iravey. | 2. Alexander D. Hodge. |
|------------------------|------------------------|

VACATION EXERCISES.

Prizes for repetition of Sophocles.

Henry I. Cunningham.	Wallace M. Conley.
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Prizes for repetition of Thucydides.

Adam W. Burnet.

SENIOR CLASS.

First-Class Certificates (in order of merit).

1. Bryce K. N. Wyllie (Jeffrey Gold Medal).
2. Bernard I. Macalpine (First Prize).
3. John Robb (Second Prize).
4. Ruth E. Marwick (Third Prize).
5. Helen B. S. Lennox.
6. Charles Cameron.
7. James Porter.

Prizes for Translation.

- | | |
|---------------------------|------------------------|
| 1. Bernard I. Macalpine.* | 2. Bryce K. N. Wyllie. |
|---------------------------|------------------------|

* Allowed an average on one paper.

Prizes for Prose.

- | | | |
|------------------------|---------------------|----------------|
| 1. Bryce K. N. Wyllie. | 2. Ruth E. Marwick. | 3. James Robb. |
|------------------------|---------------------|----------------|

Prizes for Oral Work (adjudged by the votes of the class).

- | | | |
|--------------------------|------------------|-------------------------|
| 1. Bernard I. Macalpine. | 2. James Porter. | 3. Archibald U. Millar. |
|--------------------------|------------------|-------------------------|

DEGREE AND PRIZE LIST.

BLACKSTONE EXAMINATION.

Cowan Gold Medal.

Alexander D. Hodge.

Summer Session, 1905.

Lecturer—WILLIAM RENNIE, M.A.

Prize—Charles Cameron.

Proxime accessit—John Robb.

ENGLISH LANGUAGE AND LITERATURE.

PROFESSOR WILLIAM MACNEILE DIXON, M.A., Litt.D., LL.B.

Buchanan Prize.

1. William D. Taylor.

Class Prizes.

- | | |
|---------------------------------|------------------------------------|
| 2. Henry Cook. | 8. David Ogg. |
| 3. { James R. Brown, } Equal. | 9. { Thomas F. H. Graham, } Equal. |
| { William Thomson, } | { Thomas Smith, } |
| 5. Thomas W. Armour. | 11. Adam W. Burnet. |
| 6. { Ebenezer Crombie, } Equal. | 12. William M'Nicol. |
| { William A. Powicke, } | |

First-Class Certificates.

Daniel G. Baine.

Robert W. Craig.

Charles E. Duff.

Alexander C. Grant.

William G. Johnston (Ayr).

Robert F. Ratray.

Hugh A. Reyburn.

William G. Waddell.

Andrew K. Walton.

FRENCH LANGUAGE AND LITERATURE.

Lecturer—CHARLES MARTIN, M.A., O.A.

HONOURS CLASS.

Prizes and First-Class Certificates.

First Prize.

Prize offered by the Minister of Public Instruction in France.

Elizabeth A. Forrest,	} Equal.
Mary M. Waddington,	

Second Prize.

Silver Medal offered by the "Alliance Française" of Paris.

Janey A. Keddie,	} Equal.
William A. Munro,	

First-Class Certificates.

Mary F. Armour.

Annie S. Robertson.

ORDINARY CLASS.

Prizes and First-Class Certificates.

- | | |
|--------------------|---------------------|
| 1. Donald Stalker. | 3. George Cochrane. |
| 2. William M'Minn. | |

GERMAN LANGUAGE AND LITERATURE.

Lecturer—G. P. THISTLETHWAITE, B.A., Ph.D.

ORDINARY CLASS.

Prize.

Robert F. Rattray.

First-Class Certificates.

John Robb.
George Bell.

Kurt B. Becker.

WOMEN'S DEPARTMENT.

Faculty of Medicine.

SURGERY.

Lecturer—JAMES HOGARTH PRINGLE, M.B., F.R.C.S.

Medal—Agnes Picken, M.A.

Second-Class Certificate.

Phiroza B. Malabari.

PRACTICE OF MEDICINE.

Lecturer—WALTER K. HUNTER, M.D., D.Sc.

Medal—Jessie D. Rankin, M.A., B.Sc.

Second-Class Certificates.

Jeannie M. Andrew.
Jane I. Robertson, M.A.Vera D. Reis.
Annie R. Hird.

MIDWIFERY AND GYNÆCOLOGY.

PROFESSOR MURDOCH CAMERON, M.D., and JOHN M. MUNRO KERR, M.B.

Medal—Janet A. Macvea.

Second-Class Certificates.

Jeannie M. Andrew.

Annie R. Hird.

INSANITY.

(See under Men's Department.)

OPHTHALMOLOGY.

Summer Session, 1905.

Lecturer—A. MAITLAND RAMSAY, M.D.

First-Class Certificates.

Agnes Picken, M.A. (Prize).

Elizabeth M. M'Vail.

Second-Class Certificates.

Annie R. Hird.

Jessie D. Rankin, M.A., B.Sc.

DEGREE AND PRIZE LIST.

DISEASES OF THE EAR.

Summer Session, 1905.

Lecturer—THOMAS BARR, M.D.

First-Class Certificate.

Agnes Picken, M.A.

PATHOLOGY.

Lecturer—CHARLES WORKMAN, M.D.

Medal—Jane I. Robertson, M.A.

First-Class Certificate—Martha M. Buchan.

Second-Class Certificates

Ella S. Hill, M.A.

Janet A. Macvea.

Phiroza B. Malabari.

PRACTICAL PATHOLOGY.

Summer Session, 1905.

Lecturer—CHARLES WORKMAN, M.D.

First-Class Certificates.

Jane I. Robertson, M.A. (Medallist).

Ella S. Hill, M.A.

Annie M'Crorie.

Martha M. Buchan.

Janet A. Macvea.

MEDICAL JURISPRUDENCE AND PUBLIC HEALTH.

Summer Session, 1905.

PROFESSOR JOHN GLAISTER, M.D., D.P.H. (Camb.), F.R.S.E.

First-Class Certificate.

Jane I. Robertson, M.A. (Medallist).

Second-Class Certificates.

Martha M. Buchan.

Annie M'Crorie.

ANATOMY.

Lecturer—THOMAS H. BRYCE, M.A., M.D.

SENIOR CLASS.

First-Class Certificate—Jessie C. Russell.

Second-Class Certificates.

Margaret B. S. Darroch.

Winifred M. Ross.

JUNIOR CLASS.

First-Class Certificate—Margaret E. Robertson.

Second-Class Certificate—Margaret A. Baillie.

EMBRYOLOGY AND PRACTICAL ANATOMY.

Summer Session, 1905.

Lecturer—THOMAS H. BRYCE, M.A., M.D.

Second-Class Certificates.

Mabel Foley.

Jessie C. Russell.

PHYSIOLOGY.

PROFESSOR JOHN G. M'KENDRICK, M.A., LL.D., F.R.S., and
WALTER COLQUHOUN, M.A., M.B.

Second-Class Certificates.

Ethelwyn M. Walters.

Mary C. Mitchell.

PRACTICAL PHYSIOLOGY.

*Summer Session, 1905.*PROFESSOR JOHN G. M'KENDRICK, M.D., LL.D., F.R.S., and
WALTER COLQUHOUN, M.A., M.B.

First-Class Certificates.

Jessie C. Russell (Medallist).

Jeanie W. Jones.

Second-Class Certificates.

Mabel Foley.

Winifred M. Ross.

MATERIA MEDICA AND THERAPEUTICS.

Lecturer—WILLIAM MACLENNAN, M.B.

Medal—Mabel Foley.

First-Class Certificates.

Margaret G. Forrest.

Olive Robertson.

PRACTICAL PHARMACY.

Summer Session, 1905.

Lecturer—WILLIAM MACLENNAN, M.B.

First-Class Certificates.

Jeanie W. Jones (Medallist).

Margaret E. Robertson.

Mary C. Mitchell.

Ethelwyn M. Walters, } Equal.
Jessie C. Russell, }

BOTANY.

Summer Session, 1905.

Lecturer—D. T. GWYNNE VAUGHAN, M.A.

SYSTEMATIC.

First-Class Certificate—Agnes M. M'Michael (Medallist).

Second-Class Certificate—Elizabeth R. Thomson.

DEGREE AND PRIZE LIST.

ZOOLOGY.

Summer Session, 1905.

PROFESSOR JOHN GRAHAM KERR, M.A.

SYSTEMATIC.

Second-Class Certificates.

Agnes M. M'Michael.

Helen M. Armour, M.A.

PHYSICS.

Lecturer—JAMES BLYTH, M.A., LL.D., F.R.S.E.

Medal—Louisa E. Dodge.

First-Class Certificates.

Agnes M. M'Michael.

Florence E. Sexton.

CHEMISTRY.

Lecturer—HERBERT W. BOLAM, B.Sc., Ph.D.

SYSTEMATIC CLASS.

Medal—Agnes M. M'Michael.

Second-Class Certificates.

Florence E. Sexton.

Louisa E. Dodge.

Ellen B. Orr.

PRACTICAL CLASS.

First-Class Certificate—Florence E. Sexton.

Second-Class Certificates.

Ellen B. Orr.

Marie A. A. Beard

Agnes M. M'Michael, } Equal.

Faculty of Science.

ADVANCED ZOOLOGY.

(See under Men's Department.)

GEOLOGY.

(See under Men's Department.)

Faculty of Arts.

HISTORY.

(See under Men's Department.)

MATHEMATICS.

(See under Men's Department.)

NATURAL PHILOSOPHY.

(See under Men's Department.)

PHYSICAL LABORATORY.

(See under Men's Department.)

LOGIC AND METAPHYSICS (AT THE UNIVERSITY).

(See under Men's Department.)

LOGIC AND METAPHYSICS (AT QUEEN MARGARET COLLEGE).

Lecturer—NORMAN D. SMITH, M.A., D. PHIL.

Prizes.

1. Janet Lamond.
2. { Kate M. Macintyre, } Equal.
 { Margaret B. More, }

First-Class Certificates.

Janet M'Cabe.

Lilias F. Munn.

Margaret M'Gill.

MORAL PHILOSOPHY (AT THE UNIVERSITY).

(See under Men's Department.)

POLITICAL ECONOMY.

(See under Men's Department.)

EDUCATION.

(See under Men's Department.)

LATIN.

(See under Men's Department.)

GREEK.

(See under Men's Department.)

ENGLISH LANGUAGE AND LITERATURE.

PROFESSOR WILLIAM MACNEILE DIXON, M.A., LITT.D., LL.B., and
JOHN L. MORISON, M.A.

Prizes.

1. Nichol Memorial Prize, Marion A. Wylie.
2. { Dorothy S. Allan, } Equal.
 { Jane Reid, }
4. Janet M. Rae.
5. { Annie Yuill, } Equal.
 { Catherine H. Campbell, }
8. Effie G. Kirkwood.

Special Prize, given by Mr. Morison, for best Essays.

Marie C. A. Templeton.

First-Class Certificates (in order of merit).

Margaret Roughead.

Mary S. Proudfoot.

Mary S. Mackenzie, M.A.

Eliza M. L. Allan.

Margaret B. More.

Ethelreda Hutchinson.

Agnes B. Howie.

DEGREE AND PRIZE LIST.

MIDDLE ENGLISH.

Summer Session, 1905.

Lecturer—RITCHIE GIRVAN, M.A.

Early English Text Society's Prize.

Isabel M. Milligan.

FRENCH LANGUAGE AND LITERATURE.

Lecturer—CHARLES MARTIN, M.A., O.A., and M. LÉON PITOT.

HONOURS CLASS.

(See under Men's Department.)

ORDINARY CLASS.

Prizes and First-Class Certificates.

1. Isabella Davidson.
2. Jean W. Bow.
3. { Janet Lamond, } Equal.
- { Barbara F. Watson, }
4. { Muriel Nelson, } Equal.
- { Isabella M. Ross, }

First-Class Certificates (in order of merit).

Mary E. Lewis,	} Equal.	Ada M. W. Renwick,	} Equal.
Marion G. Arthur,		Annie J. Kelly,	

GERMAN LANGUAGE AND LITERATURE.

Lecturer—G. P. THISTLETHWAITE, B.A., PH.D.

HONOURS CLASS.

Prizes.

1. Janey A. Keddie.
2. Mary M. Waddington.

First-Class Certificates.

Elizabeth A. Forrest.	Helen A. Mitchell.
Marie F. Krasser.	Ella M. Thompson.

ORDINARY CLASS.

Prizes.

1. { Isabella Davidson, } Equal.
- { Isabella M. Ross, }
2. { Mary P. Houstoun, } Equal.
- { Annie J. Kelly, }
- { Jane P. Young, }
3. { Mary Alexander, } Equal.
- { Jessie L. Walker, }
- { Janet W. Watson, }

First-Class Certificates.

Marion G. Arthur.	Catherine Lindsay.
Isabella F. Dove.	Margaret F. Macready.
Alice Green.	Elizabeth C. Reid.
Mary Hunter.	Elizabeth R. Thomson.

XIII.—EXAMINATION QUESTIONS.

I. PRELIMINARY EXAMINATION IN ARTS AND SCIENCE.

March, 1906.

ENGLISH.

FIRST PAPER—TWO HOURS.

(FIVE, and not more than FIVE, questions are to be answered. Questions 1, 2, and 6, must be answered by all.)

1. Write an essay of from two to three pages on one of the following subjects :

- (1) The problem of the "Unemployed,"
- (2) Town and Country as subjects of poetry,
- (3) The present relations of the Great Powers, including the United States and Japan.

2. Paraphrase :

True love is but a humble, low-born thing,
 And hath its food served up in earthenware ;
 It is a thing to walk with, hand in hand,
 Through the every-dayness of this work-day world,
 Baring its tender feet to every roughness,
 Yet letting not one heart-beat go astray
 From beauty's law of plainness and content :—
 A simple, fireside thing, whose quiet smile
 Can warm earth's poorest hovel to a home ;
 Which, when our autumn cometh, as it must,
 And life in the chill wind shivers bare and leafless,
 Shall still be blest with Indian summer youth
 In bleak November, and, with thankful heart,
 Smile on its ample stores of garnered fruit,
 As full of sunshine to our aged eyes
 As when it nursed the blossoms of our spring.

3. Give the derivations of *eight* of the following words : spider, hoard, algebra, bayonet, dish, mint, periwinkle, peacock, abbot, war, esquire, marshal, telegraph, ephemeral, swindle, duke.

4. Discuss the functions in a sentence of relative pronouns, relative adverbs, participles, gerunds; and write sentences to exemplify their several duties. Define and give instances of notional (=principal verb, synecdoche, proper adjective, blank verse, alliteration.

5. Correct and improve the following, giving reasons for any changes you may make :

(a) He told his friend that his brother was surprised that he had given so small a sum, for he was a very rich man, in spite of his recent losses, compared with himself.

(b) "Bois-Guilbert?" said Cedric, in the half-arguing tone, which the habit of living among dependants had accustomed him to employ, and resembled a man who talks to himself rather than to those around him.

(c) The picture of the village pastor in this poem, which we have already printed, was taken in part from the character of his father, embodied likewise recollections of his brother Henry.

(d) Moral faults only, and then only extremely rarely, should be corrected with ridicule.

6. Give a general analysis of (a) and parse in (b) italicised words :

(a) Whether from the growth of experience or the decline of animal heat, I see that age leads to these and certain other faults; and it follows, of course, that while in one sense I hope I am journeying towards the truth, in another I am indubitably posting towards these forms and sources of error.

(b) *Granted we could foresee our future what the happier should we be?*

SECOND PAPER—TWO HOURS.

EIGHT, and not more than EIGHT, questions are to be answered. Of these THREE must be taken from Section A (and of the three, 5 must be one), THREE from Section B, and TWO from Section C.

A.

1. Give a short account of any three of the following : *One of the chief characters in Chaucer's Prologue, Samson Agonistes, The Rape of the Lock, Gulliver's Travels, Rasselas, A Midsummer Night's Dream, The Seasons, Piers Plowman, Rizpah.*

2. What are the sources of *As You Like It*, and what do we owe to Shakespeare's own invention in this play?

Or,

The character of Rosalind illustrated by comparison with similar characters in other plays of Shakespeare.

3. To what extent does political bias affect, favourably or unfavourably, historical portraiture in *Woodstock*?

4. Give a general idea of Hazlitt's comparative estimate of Dryden and Pope, with some comment of your own.

5. Annotate :

(a) The current of his feeling is deep but narrow ; the range of his understanding is lofty and aspiring rather than discursive.

(b) You have indeed a formidable guardian there where cockneys or bumpkins are concerned ; but we who have been at the wars know spells for taming such furious dragons.

(c) He uses his folly like a stalking horse and under presentation of that he shoots his wit.

(d) Thus must I from the smoke into the smother.

(e) He was not something sacred and aloof from the vulgar herd of men, but shook hands with nature and the circumstances of his time.

(f) She was poor enough when I took her, for as high as Noll holds his head now.

B.

(In this Section Candidates must take the questions of ONLY one period.)

FIRST PERIOD, B.C. 55 TO A.D. 1603.

1. Write brief notes on *three* of the following : Canute, Henry I., Statute of Mortmain, Poitiers, *De Haeretico Comburendo*, Bosworth Field, Edward VI., the Star Chamber.

2. Write a short account of Edward I., *or*, Thomas Cromwell.

3. Indicate the course and result of the Wars of the Roses, *or* the Claims of English Kings to French Territory.

SECOND PERIOD, 1603-1707.

1. Write short notes on *three* of the following : James I. (of England), The Pilgrim Fathers, The Five Mile Act, Blenheim, Massacre of Glencoe, The Ironsides, Pym, Sedgemoor.

2. Give an account of the career of Wentworth, Earl of Strafford, *or*, the Earl of Shaftesbury.

3. Discuss the events and considerations that led to the Parliamentary Union of England and Scotland.

THIRD PERIOD, 1707 TO 1832.

1. Write brief notes on *three* of the following : Tories and Whigs of Anne's reign, French and Spanish support to the exiled Stuarts, Walpole's Excise Bill, Fort Duquesne, Siege of Arcot, Reform of the Calendar, Wilkes and liberty, Home Policy of the Younger Pitt, Nelson's frustration of Napoleon's schemes.

2. Compare Marlborough, Wellington, and Napoleon, as generals and as men.

3. Write a short essay on The Balance of Power as a cause of Britain's share in Continental warfare during the period.

C.

1. What railways converge upon Italy from France, Switzerland, and Austria? Name leading termini and stations passed *en route* in each of the four countries.

2. Name and briefly describe the chief islands, towns, and trade of any of the great archipelagoes of the world.

3. Locate and compare in importance the great world-centres of any three of the following products and manufactures : wheat, petroleum, one great textile industry, furs, coffee, copper.

4. Where and what are any six of the following : Raleigh, Basra, Stewart Island, Urga, Belfort, Lübeck, Lake Bangweolo, Sault Sainte Marie, Iquique?

LOWER LATIN—THREE HOURS.

(All Candidates must satisfy the Examiners in Composition and Translation.)

I. TRANSLATION.

1. Translate :

Caesar's successes against the Gauls compared with those of earlier generals.

Semper illas nationes nostri imperatores refutandas potius bello quam lacesendas putaverunt. ipse ille C. Marius, cuius divina atque eximia virtus magnis populi Romani luctibus funeribusque subvenit, *influentes* in Italiam Gallorum maximas copias repressit, non ipse ad eorum urbes sedesque penetravit. C. Pomptinus, fortissimus vir, *ortum* repente bellum Allobrogum atque hac scelerata coniuratione excitatum proeliis fregit eosque domuit, qui lacesierant, sed ea victoria contentus, re publica metu *liberata*, quievit. C. Caesaris longe aliam video fuisse rationem; non enim sibi solum cum eis, quos iam armatos contra populum Romanum videbat, bellandum esse duxit, sed totam Galliam in nostram dicionem esse *redigendam*. itaque cum acerrimis nationibus et maximis Germanorum et Helvetiorum felicissime decertavit; ceteras conterruit, *compulit*, domuit, imperio populi Romani parere adsuefecit.

2. Parse fully the five words printed in italics in the passage above.

II.

Translate into Latin Prose :

Robert the Bruce was right glad to meet his brother and his faithful friend Lord James; and had no sooner found himself once more at the head of such a considerable body of followers, than, forgetting hunger and weariness, he began to inquire where the enemy who had pursued them so long had taken up their abode for the night; "for," said he, "as they must suppose us totally scattered and fled, it is likely that they will think themselves quite secure, and disperse themselves into distant quarters, and keep careless watch: and if we have a mind to make haste we may surprise them this very night and do them more mischief than they have been able to do us during all this day's chase."

III. GRAMMAR.

1. Give (a) gen. plur. of *canis*, *mus*, *hospes*, *homo*; (b) abl. sing. of *civ*, *vis*, *robur*, *numen*; (c) abl. plur. of *moenia*, *munus*, *murus*, *pectus*; (d) gender of *cinis*, *felis*, *decus*, *ficus*.

2. Compare *idoneus, dives, malus, pulcher, amans, nobilis, graviter, audacter*.

3. Give (a) the 2nd plur. imperf. subj. act. and 3rd plur. fut. ind. pass. of *cipio, haurio, fero*; (b) the gerundive and supine of *augeo, lino, mordeo*; (c) the principal parts of *texo, veto, metior, aufero*.

4. Give the Latin for: we must spare him; do not punish me; you ought to have done this; he pretends to be poor; some did one thing, others another; he was too wise to say this.

5. Distinguish between *vēnīmus* and *rēnīmus*; *nescio quid fecit* and *nescio quid fecerit*; *cōmes* and *cōmes*; *convenire aliquem* and *convenire alicui*.

IV. SENTENCES.

1. I did not think he was the man to do this.
2. We could not prevent him from consulting his wife.
3. He said he did not know how many books he had.
4. Caesar promised to return on the 3rd of May.
5. When I see him I shall ask him why he deceived me.

HIGHER LATIN.

FIRST PAPER—TWO HOURS.

I.

1. Translate:

A Speech to Mutinous Troops.

Sedit tacitus paulisper, donec nuntiatum est deductos in forum auctores seditionis et parata omnia esse. Tum silentio per praeconem facto ita coepit: "Nunquam mihi defuturam orationem, qua exercitum meum adloquerer, credidi, non quo verba umquam potius quam res exercuerim sed quia prope a pueritia in castris habitus adsueram militaribus ingeniis. Apud vos quem ad modum loquar, nec consilium nec oratio suppeditat, quos ne quo nomine quidem appellare debeam scio. Cives? qui a patria vestra descistis—an milites? qui imperium auspiciūque abnuistis, sacramenti religionem rupistis—hostes? corpora, ora, vestitum, habitum civium agnosco, facta, dicta, consilia, animos hostium video. Quid enim vos, nisi quod Ilergetes ac Lacetani, aut optastis aliud aut sperastis? et illi tamen Mandonium atque Indebilem, regiae nobilitatis viros, duces furoris secuti sunt: vos auspiciū et imperiū ad Unbrum Atrium et Calenum Albium detulistis. Negate vos id omnes fecisse aut factum voluisse, milites: paucorum eum furorem atque amentiam esse; libenter credam negantibus."

2. Translate:

Apollo, disguised as an aged warrior, appears to Ascanius.

Ibat Apollo

omnia longaevo similis vocemque coloremque
et crines albos et saeva sonoribus arma.

atque his ardentem dictis adfatur Iulum.
 'sit satis, Aenide, telis impune Numanum
 oppetiisse tuis; primam hanc tibi magnus Apollo
 concedit laudem et paribus non invidet armis:
 cetera parce, puer, bello.' sic orsus Apollo
 mortales medio aspectus sermone reliquit
 et procul in tenuem ex oculis evanuit auram.
 agnovere deum proceres divinaque tela
 Dardanidae pharetramque fuga sensere sonantem.

II. SENTENCES.

1. Had he not been accompanied by Crassus, nothing could have prevented him from being killed.
2. I shall write and let you know how I am.
3. I asked him what he would do if he were in my place.
4. Antony caused the Romans to repent of their ingratitude towards Caesar.
5. There is no doubt that he did this to avoid displeasing his friends.

SECOND PAPER—Two Hours.

(All Candidates must satisfy the Examiners in Prose Composition.)

I.

Translate into Latin Prose:

The greater part of the foot soldiers then laid down their arms after a few minutes resistance. The second line, led by Prince Charles himself, had, during the whole action, kept so near the first, that to Sir John Cope's army they appeared but as one body; and as this unfortunate prince's courage has been impeached, it is necessary to say that he was only fifty paces behind the vanguard in the very commencement of the battle—which was, in fact, a departure from his paction with the chiefs that he should not put his person in imminent danger. Had there been any possibility of rallying the fugitives, the day might have been in some degree avenged, if not retrieved, for the first line of the Highlanders dispersed themselves almost wholly, in quest of spoil and prisoners. They were merciful to the vanquished after the first fury of the onset, but gave no quarter to the dragoon horses which they considered as taught to bear a personal share in the battle.

II. GRAMMAR, ETC.

1. Translate carefully with a note on the construction:
 - (a) inutile ferrum cingitur;
 - (b) mene incepto desistere victam!
 - (c) mortem tibi denuntiavit nisi paruiesses;
 - (d) aeternas poenas in morte timendum est.

2. Write down (giving the translation) short sentences to illustrate fully the construction of *rēfert, quippe qui, credo, muto*.

3. Scan :

(a) et tollens vacuum plus nimio Gloria verticem ;

(b) audita Musarum sacerdos ;

(c) omnem redegit Idibus pecuniam ;

and mark the quantity of each syllable of : *patre, matri, doleo, vale, ama, manebo, iturus, spolia*.

4. Explain the meaning of any four of the following : *spolia opima, consul suffectus, pedibus ire in sententiam, antesignani, praerogativa, tres viri capitales, sportula, nundinae*.

LOWER GREEK—THREE HOURS.

I. Translate :

An exhortation to victory.

"Ἄνδρες Ἀσσύριοι, νῦν δεῖ ἄνδρας ἀγαθοὺς εἶναι, νῦν γὰρ περὶ ψυχῶν τῶν ὑμετέρων ὁ ἀγὼν καὶ περὶ γῆς, ἐν ᾗ ἔφυτε, καὶ περὶ οἴκων ἐν οἷς ἐτράφητε, καὶ περὶ γυναικῶν τε καὶ τέκνων, καὶ περὶ πάντων ὧν κέκτησθε ἀγαθῶν. νικήσαντες μὲν γὰρ, ἀπάντων τούτων ὑμεῖς, ὥσπερ πρόσθεν, κύριοι ἔσεσθε· εἰ δ' ἡττήσεσθε, εὖ ἴστε ὅτι παραδώσετε ταῦτα πάντα τοῖς πολεμίοις· ἅτε οὖν νίκης ἐρῶντες, μένοντες μάχεσθε. μῶρον γὰρ τὸ κρατεῖν βουλομένους τὰ τυφλὰ τοῦ σώματος καὶ ἄοπλα καὶ ἄχειρα ταῦτα ἐναντία τάττειν τοῖς πολεμίοις φεύγοντας. μῶρος δὲ καὶ εἰ τις ζῆν βουλόμενος φεύγειν ἐπιχειροίη, εἰδὼς ὅτι οἱ μὲν νικῶντες σώζονται, οἱ δὲ φεύγοντες ἀποθνήσκουσι μᾶλλον τῶν μενόντων. μῶρος δὲ καὶ εἰ τις χρημάτων ἐπιθυμῶν ἦτταν προσίεται. τίς γὰρ οὐκ οἶδεν ὅτι οἱ μὲν νικῶντες τὰ τε ἑαυτῶν σώζουσιν, καὶ τὰ τῶν ἡττωμένων προσλαμβάνουσιν, οἱ δ' ἡττώμενοι ἅμα ἑαυτοὺς τε καὶ τὰ ἑαυτῶν πάντα ἀποβάλλουσιν ;

προσίεται=submits to, is ready to accept.

II. GRAMMAR.

1. Give :

(a) Dative singular and dative plural of ὄρνις, ναῦς, δεσπότης, ζῶν.

(b) Genitive singular and nominative plural of πάθος, οὖς, γυνή, κριτής.

(c) Accusative plural (all genders) of οὗτος, ἄδελος, μέγας, θάπτων.

2. Compare ἡδύς, δίκαιος, ὀλίγος, σωφρόνως. Give the Greek for : 1100, 50th, twenty times ; where, whither, whence ; the present generation ; Cyrus and his followers.

3. (a) Give the 2nd plural future indicative active of νομίζω, ἔχω, φέρω, ἐλαύνω.

(b) Give the nominative singular feminine perfect participle active of ἀγγέλλω, ὀρώ, θαυμάζω, δίδωμι.

(c) Give the 3rd plural aorist indicative passive of κηρύττω, λαμβάνω, ἀφίημι, ἔω.

(d) Give the meaning of στήσω. Make compounds of ἵστημι with ἀπό, διά, and μετά, and indicate the force of the preposition in each compound.

4. Parse, giving the principal parts of the verb: ἐβόων, ὁμόσαι, ταθῆναι, ἐδηδόκασι, πλήσεις, εἶσι, εἶμαι.

5. Accent: πρᾶττομεν, φιλουμεν, ἐπρᾶττεν, ἐφίλει, πρᾶγμα, πεπραγμενος, πρᾶχθεις, πρᾶκτικός.

6. Distinguish by careful translation: τοι, τοῦ—ταυτό, τοῦτο—οὐ μόνον, μόνον οὐ—φυλάττω, φυλάττομαι.

7. Translate carefully:

(a) φέρ' ἴδω, τί πρῶτον φάγω;

(b) περὶ πλείστου σε ποιούμαι.

(c) τί παθόντες πράγματά μοι παρέχουσιν;

(d) ὀλίγον δεῖν ἐπελαθόμεν τῶν ὀνομάτων.

(e) ὅπως μὴ καταφρονήσετε τῶν πενήτων.

(f) αὐτοὶ ἑαυτῶν δυνατώτεροι ἐγένοντο.

III. SENTENCES.

Translate into Greek:

(a) We ought to pardon those who have sinned unwittingly.

(b) Twice a year I go to the old country to visit my friends.

(c) Would I had died for thee, my son!

(d) Why don't you try to help the sick man?—It is no business of mine.

(e) It would have been better for Athens if this citizen had been banished.

HIGHER GREEK.

FIRST PAPER—Two Hours.

I. Translate.

Diogenes the Cynic on the vanity of success in the games.

μετὰ δὲ τοῦτο ἰδὼν τινα ἐκ τοῦ σταδίου βαδίζοντα μετὰ πολλοῦ πλῆθους καὶ μηδὲ ἐπιβαίνοντα τῆς γῆς, ἀλλὰ ὑψηλὸν φερόμενον ὑπὸ τοῦ ὄχλου, τοὺς δὲ τινὰς ἐπακολουθοῦντας καὶ βοῶντας, ἄλλους δὲ πηδῶντας ὑπὸ χαρᾶς καὶ τὰς χεῖρας αἶροντας πρὸς τὸν οὐρανὸν, τοὺς δὲ ἐπιβάλλοντας αὐτῷ στεφάνους καὶ ταινίας, ὅτε ἐδυνήθη προσελθεῖν ἤρετο τίς ἐστίν ὁ θόρυβος ὁ περὶ αὐτὸν καὶ τί συνέβη. ὁ δὲ ἔφη, Νικῶμεν, βέλτιστε ἀνδρῶν, τὸ στάδιον. τοῦτο δὲ τί ἐστίν; εἶπεν. οὐ γὰρ δὴ φρονιμώτερος γέγονας οὐδὲ μικρὸν. ὅτι ἐφθασας τοὺς συντρέχοντας, οὐδὲ σωφρονέστερος νῦν ἢ πρότερον οὐδὲ δειλὸς ἦττον, οὐδ' ἐλαττον ἀλγεῖς οὐδ' ἐλαττόνων δεήσῃ τὸ λοιπὸν οὐδὲ ἀλυπτότερον βιώσῃ. μά Δία, εἶπεν, ἀλλὰ τῶν ἄλλων Ἑλλήνων ταχίστατός εἰμι πάντων. ἀλλ' οὐ τῶν λαγῶν, ἔφη ὁ Διογένης, οὐδὲ τῶν ἐλάφων. καίτοι ταῦτα τὰ θηρία πάντων ἐστὶ δειλότατα, καὶ τοὺς ἀνθρώπους καὶ τοὺς κύνες καὶ τοὺς αἰετοὺς φοβεῖται, καὶ ζῇ βίον ἄθλιον. οἶκ οἶσθα, ἔφη, ὅτι τὸ τάχος δειλίας σημεῖον ἐστί; τοῖς γὰρ αὐτοῖς ζῴοις συμβέβηκε ταχίστοις τε εἶναι καὶ ἀνανδρότατοις. ὁ γοῦν Ἑρακλῆς διὰ τὸ βραδύτερος εἶναι πολλῶν καὶ μὴ δύνασθαι κατὰ πόδας αἰρεῖν τοὺς κακούργους, διὰ τοῦτο ἐφόρει τύξα καὶ τούτοις ἐχρήτο ἐπὶ τοὺς φεύγοντας.

II. Translate one of the following passages :

1. *Clytaemnestra appeals to Achilles to save Iphigenia, who has been brought to Aulis on pretence of marriage with him.*

- ΚΛ. ὦ τέκνον Νηρῆδος, ὦ παῖ Πηλέως, κλύεις τάδε ;
 ΑΧ. ἔκλυνον οὖσαν ἀθλίαν σε, τὸ δ' ἐμὸν οὐ φαύλως φέρω.
 ΚΛ. παῖδά μου κατακτενοῦσι σοῖς δολώσαντες γάμοις.
 ΑΧ. μέμφομαι κἀγὼ πόσει σῶ, κούχ ἀπλῶς οὕτω φέρω.
 ΚΛ. οὐκ ἐπαιδεσθήσομαί γε προσπεσεῖν τὸ σὸν γόνυ,
 θνητὸς ἐκ θεᾶς γεγῶτα· τί γὰρ ἐγὼ σεμνύνομαι ;
 ἢ τίνος σπουδαστέον μοι μᾶλλον ἢ τέκνου πέρι ;
 ἀλλ' ἄμυνον, ὦ θεᾶς παῖ, τῇ τ' ἐμῇ δυσπραξίᾳ
 τῇ τε λεχθείσῃ δάμαρτι σῇ· μάτην μὲν, ἀλλ' ὅμως
 σοὶ καταστέψας· ἐγὼ νῦν ἦγον ὥς γαμουμένην,
 νῦν δ' ἐπὶ σφαγᾷς κομίζω· σοὶ δ' ὀνειδὸς ἔζεται,
 ὅστις οὐκ ἤμυνας· εἰ γὰρ μὴ γάμοισιν ἐξύγης,
 ἀλλ' ἐκλήθης γοῦν ταλαίνης παρθένου φίλος πόσις.

Or,

2. ὥς ἔφατ', οὐδ' ἀπίθησε ποδῆνεμος ὠκέα Ἴρις,
 βῆ δὲ κατ' Ἰδαίων ὀρέων εἰς Ἴλιον ἱρήν.
 εὖρ' νιδὼν Πριάμοιο δαΐφρονος, Ἐκτορα διὼν,
 ἑσταὸτ' ἐν θ' ἵπποισι καὶ ἄρμασι κολλητοῖσιν.
 ἀγχοῦ δ' ἵσταμένη προσέφη πόδας ὠκέα Ἴρις·
 “Ἐκτορ νιδέ Πριάμοιο, Διὶ μῆτιν ἀτάλαντε,
 Ζεὺς με πατὴρ προέηκε τείν τάδε μυθήσασθαι.
 ὄφρ' ἂν μὲν κεν ὀρᾷς Ἀγαμέμνονα ποιμένα λαῶν
 θίνοντ' ἐν προμάχοισιν, ἐναίροντα στίχας ἀνδρῶν,
 τόφρ' ὑπόεικε μάχης, τὸν δ' ἄλλον λαὸν ἀνωχθι
 μάρνασθαι δηϊόισι κατὰ κρατερὴν ὑσμίνην.
 αὐτὰρ ἐπεὶ κ' ἡ δουρὶ τυπεῖς ἢ βλήμενος ἰὼ
 εἰς ἵππους ἄλεται, τότε τοι κράτος ἐγγυαλίξει
 κτείνειν, εἰς ὃ κε νῆας ἐϋσέλμους ἀφίκηαι
 δόη τ' ἡέλιος καὶ ἐπὶ κνέφας ἱερὸν ἔλθῃ.”

SECOND PAPER—Two Hours.

All Candidates must satisfy the Examiner in Prose Composition.

I. FOR GREEK PROSE COMPOSITION.

Eurybiades the Spartan, who was in command of the fleet, was unwilling to risk a battle, but wished rather to sail to the Isthmus where the land army of the Peloponnesians was assembled. This project was opposed by Themistocles. In the council of the Generals some one expressed the opinion that a man without a city had no right to speak there at all, much less to urge people who still had houses of their own to abandon them. But Themistocles turned on him and said, “We Athenians have indeed left our walls and houses because we disdain to be slaves for the sake of such trifles, but in our two hundred ships of war we have a greater city than any in all Greece.”

II. GRAMMAR.

1. Give the principal parts of the following verbs: χέω, ῥήγνυμι, παίζω, πετάννυμι, ἀνοίγνυμι, ἐνοχλῶ.

2. Distinguish δανείζειν, δανείζεσθαι; ἀποδιδόναι, ἀποδίδοσθαι; ἐρωτᾶν, αἰτεῖν; μαρτυρεῖν, μαρτύρεσθαι.

3. Translate with a note on the syntax:

(a) ἔστ' οὖν ὅπως "Ἀλκηστis ἐς γῆρας μόλοι;

(b) λανθάνουσι πρὶν δὴ τῇ Δῆλῳ ἔσχον.

(c) ἔπρασσον ὅπως τις βοήθεια ἤξει.

(d) οὐχ ὅτι ἐφυγεν ἀλλ' ἐνίκησεν.

(e) ποῦ ποτ' εἰ φρενῶν;

4. Translate into Greek:

(a) We must try to reach the town before him, otherwise we shall find the temples plundered.

(b) See that you watch the gates carefully: our foes are too numerous to be despised.

(c) There will be no safety for us until the tyrant is either imprisoned or slain.

(d) It would have been better to surrender the city on condition that the lives of our women and children were spared.

5. Scan either (a) or (b):

(a) μέθετον τὸ λαν μέθετον· ἀμαθία δυοῖν

ἐς ταῦθ' ὅταν μόλητον, αἰσχιστον κακόν.

(b) οἳ οἱ ἐποίησαν θάλαμον καὶ δῶμα καὶ αὐλήν

ἐγγύθι τε Πριάμοιο καὶ Ἑκτορος, ἐν πόλει ἄκρη.

LOWER MATHEMATICS.—THREE HOURS.

A Candidate may obtain FULL marks by doing about two-thirds of this Paper. But the Examiners may reject a Candidate who shows exceptional weakness in any of the sections A, B, C.

Marks will not be awarded to answers where the work is not shown.

A.

1. Find the prime factors of 1344, 1584, 1728, and hence obtain the greatest common measure and the least common multiple of these numbers.

2. Find the value of

$$\frac{1\frac{1}{2} + 2\frac{2}{3} + 3\frac{3}{4} + 4\frac{4}{5}}{1\frac{1}{6} + 1\frac{3}{7}};$$

$$25\cdot86 \times 66\cdot25 \div \cdot00415.$$

3. The area of a square is 3 sq. chains, find to the nearest inch the length of a side. [1 chain = 66 feet.]

4. Find in miles per hour the speed of a train that travels one kilometre in 37 seconds. [1 metre = 39·3708 inches.]

5. Find to the nearest penny the compound interest on £3750 for 3 years at $2\frac{1}{4}$ per cent.

B.

6. Find the value of

$$\frac{a^3 + b^3 + c^3 - 3abc}{a^3 + b^3 + c^3 + 3abc} \text{ when } a = -1, b = 2, c = -3.$$

7. Resolve into factors

$$156x^2 - x - 1, \\ x^2(x+y)^2 - y^2(x-y)^2.$$

8. Simplify

$$(1) \frac{x^2 + 2x^2 - 4x - 8}{2x^3 + 7x^2 + 4x - 4}, \\ \frac{x+y}{y} - \frac{y}{x+y} \quad \frac{1}{x} + \frac{1}{x-y}, \\ (2) \frac{\frac{y}{x-y} - \frac{x}{x-y}}{\frac{x}{x-y} - \frac{x}{x-y}} \times \frac{1}{y} + \frac{1}{x+y}.$$

9. Solve the equations:

$$(1) \frac{3x-2}{5} - \frac{5x-4}{7} = \frac{3-x}{8},$$

$$(2) \begin{cases} \frac{7}{x} - 4y = 2, \\ \frac{4}{x} + 7y = 29. \end{cases}$$

$$(3) (2x-19)(5x+7) = 16x+10.$$

10. Prove that
- $ab = ba$
- (1) when
- a
- and
- b
- are positive integers, (2) when
- a
- and
- b
- are proper fractions.

11. The length of a carpet is to its breadth as 17 : 14, and when laid down it leaves an uncovered strip 16 inches wide all round the room. The area of the uncovered part is
- $\frac{16}{135}$
- ths of the area of the room; find the dimensions of the room.

C.

12. Shew how to bisect a given straight line.

How would you modify the construction when the diameter of the greatest circle that can be drawn by the compasses is less than the given line?

13. Prove that if two triangles have their sides equal each to each, the triangles are equal in every respect.

In a quadrilateral $ABCD$ the side AB is equal to AD and the side CB to CD ; prove that the diagonals intersect at right angles.

14. Prove that in a right-angled triangle the sum of the squares on the sides containing the right angle is equal to the square on the remaining side.

Prove that, if two triangles have two sides of the one equal to two sides of the other each to each, and the angles opposite to a pair of corresponding equal sides right angles, the triangles are equal in every respect.

15. Prove that if two circles touch each other internally the straight line joining their centres passes through the point of contact.

Being given a circle and a point A inside it, shew how to describe a circle having A as centre touching the given circle and enclosing it.

16. Shew how to draw a tangent to a circle from a given point outside it.

A quadrilateral circumscribes a circle; shew that the sum of the angles subtended at the centre by a pair of opposite sides is two right angles.

17. From a point O outside a circle a tangent OP is drawn touching the circle at P and a secant OQR cutting the circle in the points Q and R ; prove that the square on OP is equal to the rectangle contained by OQ and OR .

Two circles of radii 9 inches and 4 inches respectively touch externally. Find the length of their common tangent.

INTERMEDIATE AND HIGHER MATHEMATICS.

FIRST PAPER.—Two Hours.

A Candidate may obtain FULL marks by doing correctly about two-thirds of this Paper; but the Examiners may reject a Candidate who shows exceptional weakness in any of the sections A, B, C.

The pass mark for Intermediate Candidates is fixed with reference to the total number of marks assigned to questions which fall under the syllabus of the Intermediate Standard; but such Candidates will receive credit for any question they may answer.

Marks will not be awarded to answers where the work is not shown.

A.

1. The lengths of the edges of a rectangular parallelopiped are 5 inches, 7 inches, and 9 inches. Find correct to one part in a thousand the volume of a cube whose surface has the same area as the surface of the parallelopiped.

2. Solve the equations:

$$(1) \ 63\sqrt{\frac{x}{x+3}} - \sqrt{\frac{x+3}{x}} = 2.$$

$$(2) \ 4x^2 - xy = 2, \ xy + 11y^2 = 1.$$

$$(3) \ (x-a)(x-b)(x-c) = x^3 - abc.$$

3. The sum of three numbers is 47, the sum of their squares is 857, and the product of two of them is 126; find the numbers.

4. Prove that the square of a fraction cannot be a whole number.

Find the square root of $29 - 12\sqrt{5}$.

5. If a, b, c, d are four positive quantities in continued proportion, prove that $\frac{a-d}{c-d} > \frac{3a}{b}$.

6. If α and β are the roots of the equation $ax^2+2bx+c=0$, prove that $a(\alpha+\beta)+2b=0$, $\alpha\alpha\beta=c$.

The difference of the roots of the equation $a_1x^2+2b_1x+c_1=0$ is equal to the difference of the roots of the equation $a_2x^2+2b_2x+c_2=0$; prove that $a_2^2(b_1^2-a_1c_1)=a_1^2(b_2^2-a_2c_2)$.

B.

7. Prove that the bisectors of the angles of a triangle meet in a point.

Prove that if the bisectors of three of the angles of a quadrilateral meet in a point the bisector of the remaining angle passes through that point.

8. Prove that the sum of two opposite angles of a quadrilateral inscribed in a circle is two right angles.

Show how to divide a circle into two parts such that the angle in one of the segments is double that in the other.

9. Prove that equiangular triangles are similar.

In a quadrilateral $ABCD$ the side CD is parallel to AB and double its length and the diagonals AC , BD meet in the point E ; prove that AE is one-third of AC .

10. From the vertex A of a triangle ABC , AD is drawn perpendicular to BC meeting it in D ; prove that the rectangle contained by AB , AC is equal to the rectangle contained by AD and the diameter of the circle circumscribing ABC .

If $AB=AC=8$ inches and the diameter of the circle is 10 inches, find the length of BC .

11. A straight line is at right angles to each of two straight lines at their point of intersection; prove it is at right angles to the plane containing them.

A triangular pyramid stands on an equilateral base and the angles at the vertex are right angles. Find to the nearest cubic inch the volume of the pyramid when the length of a side of the base is 14 inches.

C.

12. Define the *sine* and the *tangent* of an angle.

Express each in terms of the other.

13. Draw the graph of $\cos x$.

Solve the equation $2\sin^2x+\cos x=2$, and mark the corresponding positions on the graph of $\cos x$.

14. Prove that in any triangle $a=b\cos C+c\cos B$ and state the two similar formulae.

Deduce that $a^2=b^2+c^2-2bc\cos A$.

SECOND PAPER.—TWO HOURS.

A Candidate may obtain FULL marks by doing correctly about two-thirds of this Paper; but the Examiners may reject a Candidate who shows exceptional weakness in any of the sections A, B, C.

The pass mark for Intermediate Candidates is fixed with reference to the total number of marks assigned to questions which fall under the syllabus of the Intermediate Standard; but such Candidates will receive credit for any question they may answer.

Marks will not be awarded to answers where the work is not shown.

A.

1. A man invests £9438 partly in a $2\frac{3}{4}$ per cent. stock at $93\frac{1}{2}$, and partly in a $3\frac{1}{2}$ per cent. stock at 104. If the incomes derived from each investment be the same, find the amount of stock he holds in each investment.

2. Solve (1) $x - 2y = 2$, $xy = 2$; (2) $x^3 + y^3 = 152$, $xy(x + y) = 120$.

3. Simplify

$$(1) \frac{\frac{x+y}{x-y} + \frac{x^2+y^2}{x^2-y^2}}{\frac{x-y}{x+y} - \frac{x^3-y^3}{x^3+y^3}} \times \frac{(x-y)^2}{x^4+x^2y^2+y^4};$$

$$(2) (yz + zx + xy) \left(\frac{1}{x} + \frac{1}{y} + \frac{1}{z} \right) - xyz \left(\frac{1}{x^2} + \frac{1}{y^2} + \frac{1}{z^2} \right).$$

4. Prove that $(a + b + c)^5 - a^5 - b^5 - c^5$ is divisible by $(b + c)(c + a)(a + b)$ and find the other factor.

5. Prove that a quadratic equation cannot have more than two roots.

Find the condition that the roots of $x^2 + px + q = 0$ may be in the ratio of m to n .

6. Prove that $x^m \times x^n = x^{m+n}$ when m and n are positive integers.

What meaning do you attach to x^n when n is a fraction?

B.

7. Prove that the perpendiculars drawn from the vertices of a triangle to the opposite sides are concurrent.

If in an acute-angled triangle the feet of these perpendiculars are joined, prove that the angles of the triangle thus formed are bisected by the perpendiculars of the original triangle.

8. Draw a square equal in area to a given rectangle, and prove that your construction is correct.

Hence show how to solve graphically the equations $x + y = a$, $xy = b^2$.

9. If a straight line touch a circle, and from the point of contact a chord be drawn, prove that the angles which this chord makes with the tangent are equal to the angles in the alternate segments.

Two circles intersect in the points A and B and the straight line CAD is drawn perpendicular to AB meeting the circles again in C and D ; if CBD is a right angle prove that CB and DB are tangents to the circles.

10. Prove that the ratio of the areas of similar triangles is equal to the ratio of the squares on (1) corresponding sides, (2) the radii of their inscribed circles.

11. If a solid angle be contained by three plane angles, prove that any two of the plane angles are together greater than the third.

If a straight line cuts a plane prove that the angle which it makes with any straight line meeting it in that plane cannot be less than its angle of inclination to the plane.

C.

12. Prove (1) $\sec^2 A \operatorname{cosec}^2 A = \sec^2 A + \operatorname{cosec}^2 A$.

(2) $\operatorname{cosec} A (\sec A - 1) + \sin A = \cot A (1 - \cos A) + \tan A$.

13. Assuming that the ratio of the circumference of a circle to its diameter is a constant, π say, show that the circular measure of any angle at the centre of a circle is equal to the arc subtending the angle divided by the radius of the circle.

A wire AB , $1\frac{1}{2}$ feet in length, is bent so as to lie along the circumference of a hoop whose radius is 4 feet. Find the angle (in degrees) subtended at the centre of the hoop by AB [$\pi = 3\frac{1}{2}$].

14. In any triangle ABC prove that $\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$.

A tower DE stands on a horizontal plane. $ABCD$ is a straight line in the plane. The height of the tower subtends at A an angle θ , at B an angle 2θ , and at C an angle 3θ . If AB is 50 feet and BC is 20 feet, find the height of the tower and the distance CD .

FRENCH.

FIRST PAPER—ONE HOUR AND A HALF.

1. Translate into French :

RICHARD THE LION HEART.

Unfortunately the king was not so careful about his disguise as he should have been, considering he was in the country of an enemy who hated him so much as the Duke of Austria did; and one day he sent his page into a village to buy some odds and ends, and gave him his purse out of which to pay for them. The boy put the purse in his pocket, and set off. Now the shop people were a little surprised to see a strange boy come into their shop. They could tell at once that he was a foreigner, and they looked rather suspiciously at his embroidered gloves. But when he pulled a handsome purse out of his pocket, and they could see that it was full of money, they became still more suspicious. They whispered to each other that there was more in this affair than met the eye; and when the page went away they stood looking after him as he went down the street. Nothing travels so fast as gossip in a country place, and soon the story was known all over the country side. At length it reached the ears of the Duke of Austria himself, and he sent armed men out in search of these suspected travellers. Before many hours were over the Lion Heart and the page were overtaken. They were at once arrested, and thrown into a dungeon.

2. Translate into French :

- (a) When you are ill the best thing to do is to go to bed.
- (b) Please tell me if it is past four o'clock.
- (c) I see it is no use trying to hide anything from you.
- (d) Would you like me to introduce him to you?
- (e) This belongs to both of us.

SECOND PAPER—TWO HOURS.

I.

1. Translate into English :

Passage du St. Bernard par l'armée française.

On se mit en route entre minuit et deux heures du matin, pour devancer l'instant où la chaleur du soleil faisant fondre les neiges, précipite des montagnes de glace sur la tête des voyageurs téméraires qui s'engagent dans ces gorges affreuses. Il fallait huit heures pour parvenir au sommet du col, à l'hospice même du Saint-Bernard, et deux heures seulement pour redescendre à St. Remy. On avait donc le temps de passer avant le moment du plus grand danger.

Les soldats surmonterent avec ardeur les difficultés de cette route. Ils étaient fort chargés, car on les avait obligés à prendre du biscuit pour plusieurs jours, et, avec du biscuit, une grande quantité de cartouches. Ils gravissaient ces sentiers escarpés, chantant au milieu des précipices, rêvant la conquête de cette Italie où ils avaient goûté tant de fois les jouissances de la victoire, et ayant le noble pressentiment de la gloire immortelle qu'ils allaient acquérir.

THIERS.

2. Translate into English :

Épithaphe d'Elisabeth Ranquet.

Ne verse point de pleurs sur cette sépulture,
 Passant : ce lit funèbre est un lit précieux,
 Où git d'un corps tout pur la cendre toute pure ;
 Mais le zèle du cœur vit encore en ces lieux.
 Avant que de payer le droit à la nature,
 Son âme, s'élevant au delà de ses yeux,
 Avait au créateur uni la créature ;
 Et marchant sur la terre elle était dans les cieux.
 Les pauvres bien mieux qu'elle ont senti sa richesse :
 L'humilité, la peine étaient son allégresse ;
 Et son dernier soupir fut un soupir d'amour.
 Passant, qu'à son exemple un beau feu te transporte,
 Et loin de la pleurer d'avoir perdu le jour,
 Crois qu'on ne meurt jamais quand on meurt de la sorte.

PIERRE CORNEILLE.

II. GRAMMAR.

1. Make one French sentence with each of the following words and give the English translations: (1) *tout de suite*, (2) *jusqu'à*, (3) *envers*, (4) *mieux*, (5) *Si* (with an adjective immediately following).

2. Point out the difference in meaning between : *homme pauvre* and *pauvre homme* ; *mer haute* and *haute mer* ; *débiteur* and *débitant* ; *dessus* and *au-dessus de* ; and give illustrative sentences.

III. LITERATURE AND PHILOLOGY.

(ONE question only to be answered.)

(a) Give an account of *L'Avare*, or of *Le Cid*, or of *Andromaque*, or of *Les Plaideurs*.

Or

(b) Which fables of La Fontaine have you read ? Relate the story of two of them, pointing out the moral teaching which they are meant to convey to us.

Or

(c) Give a list of the words you know belonging to the same family of words as (1) *sommeil* ; (2) *drame* ; (3) *courir* ; and explain their meaning.

Or

(d) Explain the formation of adverbs ending in *-ment*. Take as examples : *bonnement*, *constamment*, and others.

GERMAN.

FIRST PAPER—ONE HOUR AND A HALF.

(Candidates may use either English or German Script.)

Translate into German :

(a) Thus died the gallant Marquis of Montrose, after he had given as great a testimony of loyalty and courage as a subject can do, and performed as wonderful actions in several battles as have been performed in this age. He was a gentleman of a very ancient family, many of whose ancestors had exercised the highest charges under the king in that kingdom, and had been allied to the crown itself. He was of very good parts, which were improved by a good education. He had always a great contempt for the Marquis of Argyle, who wanted nothing but honesty and courage to be a very extraordinary man, having all other good talents in a great degree. Montrose was in his nature fearless of danger, and never declined any enterprise for the difficulty of going through with it, and even preferred those which seemed desperate to other men. He was naturally jealous, and suspected those who did not share his views of not meaning so well as he. He was not without vanity, but his virtues were much superior, and he well deserves to be celebrated amongst the most illustrious persons of the age in which he lived.

(b) 1. You talk too fast for me to follow you.

2. He could not understand why he should be punished rather than his brother.

3. He must be told that he has to come home at once.

4. He said he would be very pleased to take a walk with you.

5. You must obey my orders, whatever they are.

SECOND PAPER—Two Hours.

(Candidates may use either English or German Script.)

I.

Translate into English :

(a) Spät am Abend des fünften Dezembers wurden die Gefangenen aus ihren bisherigen Quartieren abgeholt und über den immer noch dicht von Menschen vollgedrängten Marktplatz in das Gefängnis gebracht, worin die zum Tode verurteilten Verbrecher aufbewahrt zu werden pflegten. Es war ein unterirdisches, zwölf Fuß tiefes Gewölbe am Fuße des Kapitols, das ehemals als Brunnenhaus gedient hatte. Der Konsul selbst führte den Lentulus, Prätores die übrigen, alle von starken Wachen begleitet; doch fand der Befreiungsversuch, den man erwartete, nicht statt. Niemand wußte, ob die Verhafteten in ein sicheres Gewahrsam oder zur Richtstätte geführt wurden. An der Türe des Kerkers wurden sie den Dreimännern übergeben, die die Hinrichtungen leiteten, und in dem unterirdischen Gewölbe erdroßelt. Vor der Türe hatte, bis die Exekutionen vollzogen waren, der Konsul gewartet, und rief darauf über den Markt hin mit seiner lauten wohlbekannten Stimme der stumm harrenden Menge die Worte zu: „Sie sind tot.“ Bis tief hinein in die Nacht wogten die Haufen durch die Straßen und begrüßten jubelnd den Konsul, dem sie meinten die Sicherung ihrer Häuser und ihrer Habe schuldig geworden zu sein.

MOMMSEN.

(b) Frühlingslied.

1. Der Frühling kommt ins Land herein,
Er fliegt auf Schwalbenschwingen,
Und vor ihm her und hinterdrein
Die Vögel alle singen,
Und schweigend wohl, doch froh genug
Umflattert ihn mit leisem Flug
Und Zug auf Zug
Ein Heer von Schmetterlingen.

2. Da wird's dem Wald so jugendlich,
 Er faßt ein neu Gemüthe;
 Die ält'sten Berge stecken sich
 Nun Keiser an die Hüte;
 Ja, wo auch nur ein schmaler Spalt,
 Gesprengt in Felsen grau und kalt,
 Da alsobald
 Hängt eine frische Blüte.
3. Die schaut mit heiterm Angesicht
 Weit über alle Tale
 Entgegen da dem Morgenlicht
 Und nach dem Abendstrahle;
 Und wenn's mit kühlem Taue graut,
 Und wenn die Nacht herniedertaut,
 So beut¹ vertraut
 Und füllt auch sie die Schale. WACKERNAGEL.

¹ bietet.

II. GRAMMAR.

1. Translate into English and comment on the underlined words:
 sag ihm doch, er solle mal hierherkommen; ich ging im
 Walde so für mich hin; das ist ja Unsinn; er ist wohl
 schon fort.

2. What prepositions or cases are governed by the following verbs:
 glauben, sich freuen, sich fürchten, schmeicheln? Form sentences
 and give the English translation of them.

3. Give the German of: what was he thinking of? for my sake (use
 wegen); there is no man (Mensch) who would believe you; what
 nonsense he is talking! whatever you do, do well!

III. LITERATURE AND PHILOLOGY.

(Only ONE question to be answered.)

1. Give the meaning and explain the formation of any five of the
 following: Heimweh; Versehen; Urwald; beschließen;
 Selbstsucht; eigensinnig; Einfalt; Gruft.

2. Explain the change of vowels and consonants in ich helfe—
 du hilfst; ich halte—du hältst; der Hut—die Hüte; schlagen—
 die Schlacht; ziehen—zog.

3. Characterise briefly the following works as comedy, tragedy, ballad, etc., and name the respective authors: *Minna von Barnhelm*; *der siebenzigste Geburtstag*; *das Lied vom braven Mann*; *Oberon*; *der Eid*; *Die Frühlingsfeier*; *der wilde Jäger*; *Emilia Galotti*; *Laotsoon*; *Stimmen der Völker*.

4. Give more fully the contents of any one of the works mentioned in Question 3.

ITALIAN.

FIRST PAPER—ONE HOUR AND A HALF.

Translate into Italian :

(a) I have been trying all my life to like Scotchmen, and am obliged to desist from the experiment in despair. They cannot like me—and in truth, I never knew one of that nation who attempted to do it. There is some thing more plain and ingenious in their way of proceeding. We know one another at first sight.

The twilight of dubiety never falls upon a true Caledonian. Is he orthodox—he has no doubts. Is he an infidel—he has none either. Between the affirmative and the negative there is no border-land with him. He always keeps the path. You cannot make excursions with him—for he sets you right. His taste never fluctuates. His morality never abates. There cannot be but a right and a wrong. His conversation is as a book.

(CHARLES LAMB.)

(THREE sentences to be translated.)

(b) It is perhaps as well after all that the future does not always turn out to be what we expected.

The mere fact of his having fled is a strong proof of his guilt.

I do not believe that he troubles himself in the least about this affair, one way or the other.

It will be all the same a hundred years hence.

SECOND PAPER—Two Hours.

I.

Translate into English :

A. Sentimentalismo.

(1) Un giorno, leggendo l'*Edmonegarda* del Prati, le venne in mente di scrivere la sua storia: non era piena di strani avvenimenti? di casi straordinari? Così, comperò della carta *reale*, la migliore che trovò; fece venire il legatore, gli spiegò in che formato doveva tagliarla e come doveva rilegare il libretto. Quando l'ebbe ne fu molto contenta: aveva l'aria d'un album semplice e severo. Scrisse sul frontespizio: *Memorie della mia vita*, rimando a un altro giorno la composizione del primo capitolo, e non ne fece più nulla.

(2) Ma che diavolo vuoi? Perché hai sempre quella faccia da accompagnamento?

(DE ROBERTO.)

(3) Quando Ercole entrò nell' Olimpo, dove era stato sollevato per la sua fortezza, il suo primo saluto lo fece a Giunone.

Tutti gli dei, prima di tutti Giunone, si meravigliarono.

"La tua nemica" si diceva "tratti così?"

"Proprio lei" disse Ercole "fu la sua inimicizia che mi fornì l'occasione a grandi imprese."

(G. PASCOLI, trad. dal Lessing.)

B. Ninnananna (lullaby) popolare.

Fate la ninna, ninna, se dormite
il letto vi sia fatto di viole,
la materassa di piume gentile,
il capezzal di penne di pavone;
e le leuzuola di tela d'Olanda
fate la ninna e poi fate la nanna.

II. GRAMMAR.

(THREE questions to be answered.)

1. Give the past definite and past participle of: *persuadere, fare, volere, dare, andare.*

2. Translate: I might have been late. You should have known him at once.

3. Translate and give the plural of: That bird, that studio, that dog. A great town, a great man, a great change, a great number. A good place, a good studio, a good implement. A beautiful palace, the beautiful rainbow.

4. Conjugate the present indicative of: *Aprire, finire, giacere.*

5. Translate: How many did you give him? Are you aware of it? I shall give it to him directly.

III. LITERATURE AND PHILOLOGY.

1. Give the name of the author of the following works (those marked by an asterisk are optional) and say in which century they were written:

- | | |
|---|-----------------------------------|
| (1) Il Decamerone. | (10) Discorsi su la prima deca di |
| * (2) Il Pecorone. | Tito Livio. |
| (3) Rime in vita e in morte di | (11) Storia d'Italia. |
| Madonna Laura. | * (12) La Mandragora. |
| * (4) La Giostra. | (13) Gerusalemme Liberata. |
| * (5) La novella del grasso legnaiuolo. | * (14) Annali d'Italia. |
| (6) Morgante Maggiore. | (15) Il Giorno. |
| (7) Orlando Innamorato. | (16) Ode dei Sepolcri. |
| (8) Orlando Furioso. | (17) Il Cinque Maggio. |
| * (9) L'Italia liberata dai Goti. | (18) I Promessi Sposi. |
| | * (19) Storia d'America. |
| | (20) Odi Barbare. |

2. Give a short, but orderly, account of any *one* of the works above mentioned.

3. Indicate the open or close sound of the vowels in italics in the following words, and state the etymological reasons for such sounds: con, contemporaneo, corsa, codice, borsa, pera, tenue, cesta.

ARABIC.

FIRST PAPER—ONE HOUR AND A HALF.

Translate into Arabic with vowel points :

Then Solomon stretched out his hand to his head, and pulled it, and said : "Where hast thou been? Surely I will punish thee with a severe punishment." Then said the lapwing (al-hudhudu) to him : "O prophet of God, remember thou standest before God—He is mighty and exalted." Then, when he heard that, Solomon trembled and forgave him, thereupon he asked him : "What is it that has delayed thee away from me?" And the lapwing said : "I have discovered what thou hast not discovered, and I am come to thee, from Saba, with a trustworthy report. Verily I found a woman reigning over them, and she has been gifted with everything; she has even a splendid throne. I found her and her people worshipping the sun, besides God: and Satan hath made their works seem good to them, and hath turned them aside from the way, so that they are not rightly guided."

SECOND PAPER—TWO HOURS.

1. (a) Translate into English verses 1-5 (inclusive) of Sura 66 of the *Qoran*.

(b) Parse the verbs in the first verse, and the nouns in the second verse, and both the nouns and the verbs in the fourth verse of this passage.

2. (a) Translate into English the first nine lines on page 62 of Noeldeke's *Carmina Arabica*.

(b) Explain the force of the first wāw in the fourth line.

What is the subject of yamūru in the seventh line?

3. Give a short account of the compilation, arrangement and style of the *Qoran*; or write a short account of Mohammed's life.

DYNAMICS—THREE HOURS.

A Candidate may obtain FULL marks by doing about two-thirds of this Paper.

Marks will not be awarded to answers where the work is not shown.

1. Establish the formula $s = ut \pm \frac{1}{2}gt^2$, explaining carefully the symbols used.

A falling body is observed to pass over the final 100 feet of its descent in two seconds. Find the final velocity and the height of the point from which the body commenced to fall, neglecting the resistance of the air. ($g=32$.)

2. State Newton's Second Law of Motion. Explain the formula $F=ma$.

The retarding force on a railway truck is 12 lbs. per ton. With what acceleration will it run down an incline of 1 in 120?

3. Show how to determine the magnitude and point of application of the resultant of two like parallel forces.

A straight bar passes through two rings, at the same level, 10 feet apart. From it a weight of 250 lbs. is suspended at a place outside the rings and 2 feet from the nearest one. Find the force exerted by the bar on each ring owing to this load.

4. State and prove the conditions of equilibrium of three forces in the same plane acting on a body.

A uniform pole 12 feet long and weighing 50 lbs. rests against a smooth wall and the lower end is prevented from slipping by a peg in the ground. The inclination of the pole to the horizon is 45° . Find the pressure (1) on the wall, (2) on the pole at the peg.

5. A particle is projected from a point P with a velocity v in a direction making an angle α with the horizon. Prove that the greatest height above the level of P to which the particle rises is $\frac{v^2 \sin^2 \alpha}{2g}$.

A stone is thrown with a velocity of 50 feet per second so as just to pass horizontally over a wall 25 feet high. If the point of projection is on the same level as the foot of the wall, find its distance from the wall.

6. Define Work, Energy, Power, Horse-Power.

A stream of water flows along a channel 3 feet wide. If the depth of water is 2 feet and its velocity 4 feet per second, find, in foot-pounds, the kinetic energy of the water that flows past in a minute. [1 cubic foot of water weighs 62.5 lbs.]

7. A mass P hanging freely draws a mass Q along a smooth horizontal table by means of a string passing over a pulley at its edge; find the acceleration a and the tension of the string T .

If the table be rough, show that the acceleration will be diminished by $\mu(g - a)$, where μ is the co-efficient of friction.

8. Find the relation between the power and the weight in that system of pulleys in which each string is attached to the weight, the strings being parallel and the weights of the pulleys being neglected.

If there are three pulleys, two of them moveable, and the weight of each $\frac{1}{4}$ lb., what will be the value of the power when the weight is 15 lbs.?

9. A body of weight W rests on a smooth inclined plane. Find (1) the power which acting horizontally will keep the body at rest, (2) the pressure on the plane.

A weight can be supported on an inclined plane by a force Q acting along the plane, or by a force $2Q$ acting horizontally. Find the weight.

10. Find the position of the centre of gravity of a uniform triangular plate.

If such a plate rests on a pillar with a triangular top the sides of which join the middle points of the sides of the plate, find the greatest weight which can be placed at a vertex of the plate without upsetting it, when the weight of the plate is W .

11. A body whose mass is m moves with uniform speed v in a circle of radius r . Prove that a force $\frac{mv^2}{r}$ is required to keep it in its circular path, and that this force is directed along the radius and towards the centre of the circle.

A person skating on ice at the rate of $16\sqrt{2}$ feet per second describes a circle of $16\sqrt{3}$ feet radius. What is his inclination to the vertical?

12. Distinguish between the density and the specific gravity of a substance.

Calculate the mass of 1 c.c. of a solid having given that 720 grams of it when immersed in water weigh 645 grams. Find also its specific gravity.

13. Describe the essential parts of a hydraulic press.

In a hydraulic press the pump ram is 1·5 inches in diameter, the press ram is 15 inches in diameter. If the efficiency of the press is 80 per cent., find the force which must be exerted on the pump ram to secure a force of 36 tons by the press.

14. State Boyle's Law.

Show how the law may be verified experimentally for pressures greater than an atmosphere.

A diving-bell with a capacity of 200 cubic feet rests on the bottom in water 136 feet deep. If the height of the mercury barometer is 30 inches, and the specific gravity of mercury is 13·6, find how many cubic feet of air at atmospheric pressure are required to fill the bell.

II.—FOR DEGREE OF M.A.

I. FOR ORDINARY DEGREE.

A.—DEPARTMENT OF LANGUAGE AND LITERATURE.

LATIN TRANSLATION—Two Hours.

Translate into English :

- (a) Virgil, *Aeneid*, v. 362—377.
- (b) Horace, *Odes*, iii. 25. 1—18.
- (c) Horace, *Satires*, ii. 6. 60—76.
- (d i) Cicero, *Pro Archia*, c. vii. §§ 15, 16.
- (d ii) Cicero, *Pro Milone*, c. xxviii. § 76.
- (e) Tacitus, *Annals*, xiv. c. 33.

LATIN PROSE—Two Hours.

It was the last that was ever seen of them upon earth. They all went down together, in the midst of the fight, and were never heard of more. The battle terminated, as usual in those conflicts of mutual hatred, in horrible butchery, hardly any of the patriot army being left to tell the tale of their disaster. At least four thousand were killed, including those who were slain on the field, those who were suffocated

in the marshes or the river, and those who were burned in the farm-houses where they had taken refuge. It was uncertain which of these various modes of death had been the lot of Count Louis, his brother, and his friend. The mystery was never solved. They had probably all died on the field; but stripped of their clothing, with their faces trampled upon by the hoofs of horses, it was not possible to distinguish them from the less illustrious dead. It was the opinion of many that they had been drowned in the river; of others that they had been burned.

LATIN GENERAL PAPER—TWO HOURS.

A. UNPREPARED TRANSLATION.

Translate :

Ac Romulus cum septem et triginta regnavisset annos et haec egregia duo firmamenta rei publicae peperisset, auspicia et senatum, tantum est consecutus, ut, cum subito sole obscurato non comparuisset, decorum in numero conlocatus putaretur; quam opinionem nemo umquam mortalis adsequi potuit sine eximia virtutis gloria. Atque hoc eo magis est in Romulo admirandum, quod ceteri, qui di ex hominibus facti esse dicuntur, minus eruditis hominum saeculis fuerunt, ut fingendi proclivis esset ratio, cum imperiti facile ad credendum impellerentur, Romuli autem aetatem minus his sescentis annis iam inveteratis litteris atque doctrinis omnique illo antiquo ex inculta hominum vita errore sublato fuisse cernimus.

B. GRAMMAR.

1. Parse fully : *sueverat, praeepes, madefecerat, interritus, traxe.*
2. Translate with short notes on syntax :
 - (a) Tu testis in undis quam molem subito excierit.
 - (b) Di quibus imperium est pelagi.
 - (c) Ipsa praesumendo remedia muniverat corpus.
 - (d) Hostibus irrisui fuit.
 - (e) Memor nostri Galatea vivas.
3. Scan the following lines and name the metres :
 - (a) Fronte curvatos imitatus ignis.
 - (b) Rite deos prius adprecari.
 - (c) Albi ne doleas plus nimio memor.
 - (d) Illum et labentem Teucri et risere natantem.

C. HISTORY AND ANTIQUITIES.

1. Write a short account of Hannibal.
2. What do we hear of relations between Greece and Rome during this period?
3. Describe the locality and the action of *either* the battle of the Trasimene Lake *or* Cannae.
4. What was the political position of the Plebs at the beginning and at the end of this period?
5. What was the economical and political condition of the Italian provinces after the Punic Wars?

GREEK TRANSLATION.—Two Hours.

Translate into English :

- (a) THEOCRITUS, XV., 60—72.
 - (b) LEONIDAS, 61 and 95, or
 - (c) *Odyssey*, X. 133—150.
 - (d) ARISTOPHANES, *Acharnians*, 496—514.
 - (e) ANDOCIDES, *de Mysteries*, 146—147.
 - (f) ARISTOTLE, *Ethics*, IV.
-

GREEK PROSE AND GRAMMAR.—Two Hours.

1. Turn into Greek :

The judge at once sent some of his people to my brother's house, to bring away everything he had ; and as soon as the things were deposited in his warehouse, he ordered my brother to leave the city, and never to return ; because he was afraid, if my brother remained there, he would go and complain of his injustice to the caliph. So he departed from the city, and fled for refuge to another town. But on his road he met some robbers, who stripped him of his clothes. I was no sooner informed of this new misfortune which had befallen him, than I took some clothes with me, and went to find him out. After consoling him as well as I could, I brought him back with me into the city quite privately, and took as much care of him as of my other brothers.

2. Parse, translate and derive the following words :

ἀωτέιτε, ἐπητανόν, ἐννεώρουσιν, λό', αἰσιώθησαν, ἀννείται, κήπιχάριται, ἰώνγα, αἱ τράφεν λῆς, ἦνθες, ποτέθηκα.

3. Translate the following sentences, and comment on their syntax :

- (a) Ἑρμῆ μολαῖε τὴν γυναῖκα τὴν ἐμὴν οὕτω μ' ἀποδόσθαι τὴν τ' ἐμῶντῳ μητέρα.
- (b) ἀθανάτοισιν ἀπεχθόμενος τόδ' ἱκάνεις.
- (c) κῆρ ἄχεϊ μεγάλῳ βεβολημένος.
- (d) τῆς κεφαλῆς κατέαγε περὶ λίθον πεσών.
- (e) ἄλλο τι οὖν ἢ νῦν ὁ ἀποκτείνας σε καθαρὸς ἔσται ;
- (f) ἐπρίατο τριάκοντα ταλάντων.
- (g) μεγαλοπρεποὺς δὲ καὶ οἶκον κατασκευάσασθαι πρεπόντως τῷ πλούτῳ.

4. What dialects, other than Attic, are to be met with in your authors? Give a few characteristics which distinguish each of them.

GREEK GENERAL PAPER.—Two Hours.

A.

Translate into English :

1. Ἐγωγε νομίζω, ὦ ἄνδρες, τοὺς ἀνθρώπους οὐκ ἐν τῷ οἴκῳ τὸν πλοῦτον καὶ τὴν πενίαν ἔχειν ἀλλ' ἐν ταῖς ψυχαῖς. Ὅρῳ γὰρ πολλοὺς μὲν ἰδιώτας, οἱ πάνυ πολλὰ ἔχοντες χρήματα οὕτω πένεσθαι ἡγοῦνται ὥστε πάντα μὲν πόνον, πάντα δὲ κίνδυνον ὑπομένουσιν, ἐφ' ᾧ πλεῖονα κτήσονται. Τύραννοι δ' εἰσὶ τινες οἱ

ὅλους μὲν οἴκους ἀναιροῦσιν, ἀθρόους δ' ἀποκτείνουσι, πολλάκις δὲ καὶ ὅλας πόλεις χρημάτων ἕνεκα ἐξανδραποδίζονται. τούτους μὲν οὖν ἔγωγε καὶ πάνυ οἰκτεῖρω τῆς ἄγαν χαλεπῆς νόσου.

2. Φησὶν τις εἶναι δῆτ' ἐν οὐρανῷ θεούς ;
οὐκ εἰσὶν οὐκ εἰς'. εἴ τις ἀνθρώπων λέγει,
μὴ τῷ παλαιῷ μῶρος ὦν χρήσθω λόγῳ.
σκέψασθε δ' αὐτά, μὴ 'πι τοῖς ἐμοῖς λόγοις
γνώμην ἔχοντες. φήμ' ἐγὼ τυραννίδα
κτείνειν τε πλείστους κτημάτων τ' ἀποστρεῖν,
ὄρκους τε παραβαίνοντας ἐκπορθεῖν πόλεις.
καὶ ταῦτα ὁρῶντες μᾶλλον εἰς' εὐδαιμόνες
τῶν εὐσεβούντων ἡσυχῇ καθ' ἡμέραν.

B.

(Only FOUR of the following questions need be attempted.)

1. How far is it possible to separate fact from fiction in the *Odyssey*? What identifications for Aeolus and Circe have been proposed?
2. Illustrate from Andocides and Aristophanes the state of the Athenian political world at the time of the Peloponnesian war.
3. Account for the birth of a new and genuine form of poetry at Alexandria.
4. Mention any points in which Aristotle's analysis of virtues and vices differs from the modern view of them.
5. Write a short account of the events which took place between the Persian and Peloponnesian war.
6. Assign any six of the following to their century, with a brief indication of their sphere: Epicharmus, Antiphon, Clisthenes, Terpander, Phrynichus, Pisander, Iphicrates, Hyperides, Critias, Lysias, Periander, Polycrates, Theophrastus.
7. What do you understand by the terms *Epyllion*, *Mime*, ἐπίγραμμα ἀναθηματικόν?

ENGLISH LANGUAGE AND LITERATURE.

THREE HOURS.

(Answer NINE questions, taking ONE from A, ONE from B, FIVE from C, and TWO from D.)

A. LITERARY THEORY.

1. "Epic poetry is inferior to tragedy," said Aristotle. Give his reasons for this opinion. What has Dryden to say upon this subject?
2. "It is the province of the same person to compose tragedy and comedy, and he who is a tragic artist is a comic artist too" (*Plato*). Discuss comedy in the light of this remark.
3. Define and discuss the realistic method in literature.

B. PHILOLOGY.

4. Illustrate Chaucer's use of the final "e."
5. Give an account of the various direct borrowings from Latin. What are the special characteristics of the words borrowed in each period?
6. What is meant by *cognate* languages? Illustrate the relations existing between Greek or Latin and English.

C.

7. Prove that *The Tempest* is one of the latest of Shakespeare's plays. What characteristics has it in common with the late group of "Romances" among which it is generally classed?
8. Characterise briefly, with examples, the lyric poetry of the seventeenth century.
9. Illustrate the various uses of the Ode form by the chief poets from Pope to Keats.
10. Discuss (a) the sentimentalism of Richardson, Sterne and Mackenzie, (b) the romances of the school of Terror.
11. Give some account of the more famous literary controversies of the eighteenth century.
12. Mention the distinguishing characteristics of authentic ballad literature, and estimate the influence of Percy's *Reliques* upon English poetry.
13. Discuss *two* of the following statements: (a) "Mediocrity said its own true word in Gray's *Elegy*." (b) "The whole history of the Romantic revival can be traced in the literary career of Gray." (c) "The Muse gave birth to Collins, she did but give suck to Gray."
14. With the *Knight's Tale* as text discuss the question of Chaucer's originality in poetry.
15. Estimate the influence of Parliamentary character and incident on the satire of the late eighteenth century.
16. "As a poet Blake was in advance of his time." Prove this thesis and outline his theory of the province of art.
17. Compare the Lyrics of Shelley with those of Keats. Have you noticed any differences in their treatment of Nature?

D.

18. Write notes on (a) the supernatural element in *The Tempest*, (b) the personality and temperament of Macbeth.
19. Illustrate how the imagery employed in *Macbeth* serves to heighten the tragic horror of the action.
20. What light do *King Lear*, *Macbeth*, and *The Tempest* respectively throw upon Shakespeare's use of prose?

21. Write short notes upon the following passages, naming the speaker in each case :

- (a) This castle hath a pleasant seat ; the air
Nimbly and sweetly recommends itself
Unto our gentle senses.
- (b) If a man were porter of hell-gate, he should have old turning
the key.
- (c) Good things of day begin to droop and drowse.
- (d) Be not afraid ; the isle is full of noises.
- (e) I' the commonwealth I would by contraries
Execute all things.

22. Write a short account of six of the following, giving the authors' names :

- (a) *O Crudelis Amor* (' When thou must home to shades of
underground').
- (b) *The Two Corbies*, (' As I was walking all alane').
- (c) *The Song of David* (' He sang of God, the mighty source').
- (d) *The Passions* (' When Music, heavenly maid, was young').
- (e) *The Education of Nature* (' Three years she grew in Sun and
Shower').
- (f) *The Maid of Neidpath* (' O lovers' eyes are sharp to see').
- (g) *After Blenheim* (' It was a summer evening').
- (h) *Rosabelle* (' O listen, listen, ladies gay').

FRENCH LANGUAGE AND LITERATURE.

FIRST PAPER—THREE HOURS.

I. Traduire en Anglais :

LES CHATS.

Décidément, la mode est aux chats !

J'ignore ce que l'avenir réserve au chat et ce qui résultera pour lui de cette situation nouvelle.

Mais en attendant qu'un poète analyste fixe en quelques pages magistrales et définitives la délicate physiologie du chat moderne, j'ai voulu noter, prises sur le vif, deux ou trois observations faites pour caractériser l'ancien chat, le chat demi-rustique tel qu'on le connaît dans les familles, allié à l'homme, non son esclave, n'acceptant de nos mœurs que ce qu'il en veut, et par l'inquiétante observation de son regard, la royale indolence de sa démarche, la fantaisie de ses agressions, se plaisant à rappeler que les bois sauvages furent sa première demeure et qu'il y a toujours du tigre en lui.

Ce qui ne l'empêche pas, à l'occasion, de montrer l'esprit le plus subtil, l'imagination la plus vive, et parfois, n'en déplaît à ceux qui le taxent d'égoïsme, la plus exquise sensibilité

J'ai autrefois habité une vieille maison de province qui était un vrai paradis pour les chats à cause de ses longs et noirs corridors, de ses combles jamais visités et tout à fait propices aux secrètes installations, aux hurlantes batailles, avec mille issues vers la liberté du toit, asile sacré, inviolable observatoire, d'où l'on contemple, ronronnant tout le long du jour, par delà les dernières maisons, la ceinture verte des champs, et le soir venu, l'infini bleu piqué d'étoiles.

PAUL ARÈNE.

II. Translate into French :

Either (a)

THE DAFFODILS.

I wander'd lonely as a cloud
That floats on high o'er vales and hills,
When all at once I saw a crowd,
A host of golden daffodils ;
Beside the lake, beneath the trees,
Fluttering and dancing in the breeze.

The waves beside them danced ; but they
Out-did the sparkling waves in glee ;
A poet could not but be gay
In such a jocund company :
I gazed—and gazed—but little thought
What wealth the show to me had brought :

For oft, when on my couch I lie
In vacant or in pensive mood,
They flash upon that inward eye
Which is the bliss of solitude ;
And then my heart with pleasure fills,
And dances with the daffodils.

WORDSWORTH.

Or (b)

THE DEATH OF CHATHAM.

When the Duke of Richmond had spoken Chatham rose. For some time his voice was inaudible. At length his tones became distinct and his action animated. Here and there his hearers caught a thought or an expression which reminded them of William Pitt. But it was clear that he was not himself. He lost the thread of his discourse, hesitated, repeated the same words several times, and was so confused that, in speaking of the Act of Settlement, he could not recall the name of the Electress Sophia. The House listened in solemn silence, and with the aspect of profound respect and compassion. The stillness was so deep that the dropping of a handkerchief would have been heard. The Duke of Richmond replied with great tenderness and courtesy ; but while he spoke, the old man was observed to be restless and irritable. The Duke sat down. Chatham stood up again, pressed his hand on his breast, and sank down in an apoplectic fit. Three or four lords who sat near him caught him in his fall. The House broke up in confusion.

MACAULAY.

N.B.—*Higher marks attainable with (a) than with (b).*

SECOND PAPER—THREE HOURS.

I. *History of the Language.* (*Answer in English ONE question only.*)

(a) Indicate briefly the main characteristics of the grammar of the old French period.

(b) Illustrate the transformations which the vocabulary of the French Language underwent at the various stages of its development.

(c) Say what you know of the struggle between Latin and French in the XVI century.

II. *Versification.*

Scan the following lines, and indicate the place and length of the cæsura :

Je vous conseille, moi, de prendre cet époux.

Vous n'aurez pas grand peine à le suivre, je crois.

Suffit : vous allez être à point nommé servie.

Votre père se moque et ce sont des chansons.

Un mur clôt la fontaine où, par l'heure échauffée,
Folâtre, elle buvait en descendant des bois ;
Elle prenait de l'eau dans la main, douce fée,
Et laissait retomber des perles de ses doigts !

III. *Composition française.*

Traiter l'un des sujets suivants :

(a) Que pensez-vous des servantes de Molière, et en particulier, de Nicole et de Dorine ? Comparer leur situation, leur éducation, leur caractère, leurs idées et le rôle qu'elles jouent dans l'intrigue.

(b) Le théâtre de Molière est-il le théâtre d'une société, d'une époque et d'une nation particulières, ou bien est-il de tous les temps et de tous les pays ? Illustrer par des exemples précis toutes les observations que vous présenterez pour justifier votre opinion.

(c) Montrer comment l'oeuvre de Molière est en harmonie avec sa vie et son caractère.

GERMAN LANGUAGE AND LITERATURE.

FIRST PAPER—THREE HOURS.

1. Translate into German :

He soon acquired great reputation, not only for piety, but for his love of knowledge and his unwearied application to study. He had been taught the philosophy and theology which were then in vogue by very able masters, and wanted not penetration to comprehend all the distinctions with which they abound ; but his understanding, naturally sound, and superior to everything frivolous, soon became disgusted with those subtle and uninstrusive sciences, and sought for some more

solid foundation of knowledge and piety in the Holy Scriptures. Having found a copy of the Bible, which lay neglected in the library of his monastery, he abandoned all other pursuits and devoted himself to the study of it with such eagerness as astonished the monks, who were little accustomed to derive their theological notions from that source.

2. Write a short essay, *in German*, either on Schiller, or on Wieland.

GRAMMAR.

(Answer SIX of the following questions.)

1. At what period and in what form did the *Umlaut* first make its appearance? Trace its history.

2. Give a table showing all the languages which fall under the head of Indo-European.

3. Account for the change of *t* to *z*, in *Confluentia*—Coblenz. When did this change take place, and to what process does it belong?

4. Explain the presence of the letters italicised in the following words: *niemand*, *meinetwillen*, *nichts*, *Sonnenblick*, *Religionsunterricht*, *selbst*, *ist*, *bleiben*.

5. What is the difference between the genitive of time and the accusative of time?

6. What do you know about the influx of foreign words into German?

7. State the general rules for the length of the vowels.

8. How do you explain the fact that neuter substantives in Latin, such as, *studium*, *praemium* are feminine in German?

SECOND PAPER—THREE HOURS.

1. Translate into English:

(a) Die stärksten Aeuszerungen der Nichtachtung liegen in der Regel dicht neben den herzegewinnenden Lauten einer weichen Zärtlichkeit. Aber in Friedrich war, so scheint uns, eine auffallende und seltsame Verbindung von zwei ganz entgegengesetzten Richtungen des Gemüths, welche sonst auf Erden in ewig unversöhntem Kampfe liegen. Er hatte ebenso sehr das Bedürfnis sich das Leben zu idealisiren, als den Drang, sich und Andern ideale Stimmungen unbarmherzig zu zerstören. Seine erste Eigenschaft war vielleicht die schönste, vielleicht die leidvollste, mit welcher ein Mensch für den Kampf der Erde ausgestattet wird. Er war allerdings eine Dichternatur, er besasz in hohem Grade jene eigenthümliche Kraft, welche die gemeine Wirklichkeit nach idealen Forderungen des eigenen Wesens umzubilden strebt und alles Nahe mit dem holden Schein eines neuen Lebens überzieht.

Freytag.

(b) Euch angeklagt?—Das ist, mit seiner Gunst—
Erlagen.—Hört mich, Nathan!—Ich bin nicht
Der Mensch, der irgend etwas abzuleugnen

Im Stande wäre. Was ich that, das that ich !
 Doch bin ich auch nicht der, der alles, was
 Er that, als wohlgethan vertheid'gen möchte.
 Was sollt' ich eines Fehls mich schämen ? Hab'
 Ich nicht den festen Vorsatz ihn zu bessern ?
 Und weisz ich etwa nicht, wie weit mit dem
 Es Menschen bringen können ?—Hört mich, Nathan !—
 Ich bin des Laienbruders Tempelherr,
 Der Euch verklagt soll haben, allerdings.—
 Ihr wiszt ja, was mich wurmisch machte ! was
 Mein Blut in allen Adern sieden machte !

Nathan der Weise.

- (c) Sie folgten, wenn der *Heribann* erging,
 Dem *Reichspanier* und schlugen seine Schlachten.
 Nach *Welschland* zogen sie gewappnet mit,
 Die Römerkron' ihm auf das Haupt zu setzen.
 Daheim regierten sie sich fröhlich selbst
 Nach altem Brauch und eigenem Gesetz ;
 Der höchste Blutbann war allein des Kaisers.
 Und dazu ward bestellt ein groszer Graf,
 Der hatte seinen Sitz nicht in dem Lande.
 Wenn Blutschuld kam, so rief man ihn herein,
 Und unter offnem Himmel, schlicht und klar,
 Sprach er das Recht und ohne Furcht der Menschen.
 Wo sind hier Spuren, dass wir Knechte sind ?
 Ist einer, der es anders weiss, der rede !

Wilhelm Tell.

- (d) Nicht für den Kaiser, wohl die Hälfte kam
 Aus fremdem Dienst feldflüchtig uns herüber,
 Gleichgültig, unterm *Doppeladler* fechtend,
 Wie unterm Löwen und den Lilien.
 Doch alle führt an gleich gewalt'gem Zügel
 Ein Einziger, durch gleiche Lieb' und Furcht
 Zu einem Volke sie zusammenbindend.
 Und wie des Blitzes Funke sicher, schnell,
 Geleitet an der *Wetterstange*, läuft,
 Herrscht sein Befehl vom letzten fernen Posten,
 Der an die Dünen branden hört den *Belt*,
 Der in der *Etsch* fruchtbare Thäler sieht,
 Bis zu der Wache, die ihr Schilderhaus
 Hat ausgerichtet an der Kaiserburg.

Die Piccolomini.

Write notes on the words printed in italics.

2. Comment on : *auf der Leipziger Messen* ; *die drei scharfe Schützen* ; *ein Koller von Elendshaut* ; *Weinschank* ; *Bramarbas* ; *Wallone* ; *selbst* ; *in der Lützner Schlacht* ; *Fröner* ; *Meinrads Zell* ; *Rütli* ; *selbzwanzigster* gefangen.

LITERATURE.

(Answer SIX of the following questions ; TWO at least from A.)

A.

1. Give an outline of the prologue of *Wallenstein*.
2. Sketch the plot of *die Piccolomini*.
3. Analyse the chief characters in Lessing's *Nathan*.
4. Draw a map of Lake Lucerne, and mark the places on it mentioned in *Tell*. Describe the scene on the *Rütli*.

B.

5. Discuss the value of the Crusades as a factor in the intellectual life of Europe.
6. What do you understand by the Beast Epic ?
7. The Reformation had a stimulating effect upon the German Drama. Examine the truth of this statement.
8. What was the so-called 'bardic' movement ?
9. Describe the influence of English literature upon that of German in the eighteenth century.

ITALIAN LANGUAGE AND LITERATURE.

FIRST PAPER—THREE HOURS.

(a) Translate into Italian prose :

1. What shall be done with all these tears of ours ?
 Shall they make water-springs in the fair heaven
 To bathe the brows of morning ? or like flowers
 Be shed and shine before the starriest hours,
 Or made the raiment of the weeping seven ?

SWINBURNE.

2. The furnace was fierce, and his pride struggled long and hard. When Great Britain declared war on the French Republic he suffered a shock, he says, that threw him out of the pale of love, and soured and corrupted his feelings upwards to the source. When prayers for victory were offered up in the churches he sat silent among the congregation and "fed on the day of vengeance yet to come." And worse than this, the foothold of his sympathies on the other side was steadily being undermined. The best blood of France had been spilt on the scaffold, and among the victims were many of the chiefs whom he admired and had been willing to follow. The war for liberty was changed by its own success into a war for conquest and the French appeared as the oppressors of humbler peoples. Yet still Wordsworth, angry and stubborn, clung to his old tenets as if they were "the very being of the immortal soul."

WALTER RALEIGH.

(b) Translate into English :

1. La stagion lieta e l'abito gentile
ancor sorride a la memoria in cima
e il verde colle ov'io la vidi prima.

Brillava a l'aere e a l'acque il novo aprile,
piegavan sotto il fiato di ponente
le fronde a tremolar soavemente.

Ed ella per la tenera foresta
bionda cantava al sole in bianca vesta.

CARDUCCI.

2. Al nome di Gesù Cristo crocifisso e di Maria dolce.

Carissima madre in Cristo dolce Gesù. Io Catarina, serva e schiava de' servi di Gesù Cristo, scrivo a voi nel prezioso sangue suo; con desiderio di vedervi con vero e perfettissimo lume, acciò che in tutte le vostre operazioni riceviate lume: il quale lume è una vita di Grazia; perché tutte le operazioni che sono fatte con lume di timore di Dio danno vita. Ma senza questo lume sono fatte tutte in morte; andiamo per la tenebra in tanta ignoranza e cecità che la verità discerniamo in bugia e la bugia in verità, la luce in tenebre, e la tenebra in luce. Da questo procede che il gusto dell'anima è infermato, che subito le cose buone gli paiono cattive, e le cattive, gli paiono buone. Perduto ha il cognoscimento di sé che non conosce il male suo. Questo gli addiuvine per la privazione del lume. Oimè, Oimè, carissima madre, tutto questo procede dalla nuvola dell'amore proprio, che offusca l'occhio dell'intelletto nostro, che non ci lascia discernere la verità; facci debili e volubili che ci voltiamo come la foglia al vento. È uno veleno che attossica l'anima: e non attossica né avvelena sé senza altrui; perocché, subito che noi siamo privati della carità, noi non rendiamo la benevolenza e dilezione al prossimo nostro, trapassiamo l'obbedienza della santa Chiesa.

SANTA CATERINA DA SIENA.

SECOND PAPER—THREE HOURS.

I. GRAMMAR.

(Two questions only to be answered.)

(a) Sketch a short lesson on the *Pronomi congiuntivi*, giving a clear table of them, explaining their position in the sentence and how they group together. With examples.

(b) Which prepositions can be used before the infinitive tense when this is ruled by another verb?

(c) Write present indicative, preterite indicative and present subjunctive of the following verbs: *comporre*, *chiedere*, *togliere*, *indurre*.

II. LITERATURE.

(One question only to be answered.)

(a) Sunto della storia della novella dal Novellino al Gobbo di Peretola.

(b) L'opera del Boccaccio.

(c) Breve confronto fra la prosa del Carducci e la prosa del Manzoni.

B.—DEPARTMENT OF MENTAL PHILOSOPHY.

LOGIC—THREE HOURS.

(Not more than TEN questions to be attempted. Two questions to be taken from EACH of the Sections A, B, and C.)

SECTION A.

1. What do you take to be the significance and ground of validity of the Axioms of Contradiction and Excluded Middle?

2. Explain and examine the distinction between analytic and synthetic judgments.

3. State and discuss the doctrine of the quantification of the predicate.

4. (a) Define Obversion and point out the principle on which this form of inference is based.

(b) State the logical relation, if any, that holds between the first of the following propositions and each of the others. If any proposition cannot be inferred from the first, say whether it is consistent with it or not:

- (i) Good men alone are wise.
- (ii) He who is good is not unwise.
- (iii) Anyone who is not good is unwise.
- (iv) No unwise men are good.
- (v) Not all good men are wise.
- (vi) It is false that all unwise men are good.

5. Analyse the conception of Cause as it is used in inductive investigation.

6. How does experiment differ from observation? Is the difference fundamental? On what grounds is the method of Difference regarded as specially a method of experiment?

SECTION B.

7. How far, if at all, is it true to say that introspection furnishes us with a direct and immediate knowledge of mental states? Does the process of introspection differ essentially in character from the process of observing what takes place in the world of external nature?

8. How would you distinguish between Sensation and Perception? Explain the statement that "the pure sensation is a psychological myth."

9. Examine the statement of Kant that "there are three absolutely irreducible faculties of the mind, namely knowledge, feeling and desire."

10. Explain and illustrate Weber's law, indicating its significance with regard to the psychological "law of relativity."

11. Give a psychological analysis of the perception of distance.

12. Explain the laws of Association by contiguity and similarity. Can they be reduced to a single law?

SECTION C.

13. What distinction does Berkeley draw between universal notions and abstract ideas? Critically examine the grounds on which he agrees that all knowledge and demonstration are about the former, while he rejects the latter as fictitious.

14. "It is evident the supposition of external bodies is not necessary for the producing our ideas; since it is granted that our ideas are produced sometimes, and might possibly be produced always, without the concurrence of external bodies."

Explain and discuss this statement.

15. Dr. Johnson "refuted" Berkeley by striking his foot against a stone. Could Berkeley have given a satisfactory answer to this argument?

16. How does Berkeley interpret physical causation, and what is his ideal of scientific explanation?

17. What is Descartes's ideal of knowledge, and how is it connected with his *Cogito ergo sum*?

18. State carefully Descartes's account of the relation of mind and body (a) in sense-perception, (b) in bodily movement.

MORAL PHILOSOPHY—THREE HOURS.

(All Candidates for the Degree are required to answer not less than TWO nor more than THREE questions in section A, and not less than SIX nor more than SEVEN in section B.)

SECTION A.

1. How does Plato deal with the contention that Society is an artificial product and contrary to nature?

2. What connection does Plato find to subsist between artistic or aesthetic training and moral rightness of character?

3. Sketch the communistic proposals of Plato and explain the criticism passed upon them by Aristotle. Examine generally the view that social co-operation can be secured only by excluding as far as possible personal sentiments and interests.

4. Explain with care Plato's conception of "the Good" and its relation to the intellectual and moral life of the individual. Illustrate your answer by reference to the simile of the Cave.

5. Write a short note on (i) Plato's view of the relation between body and mind as exemplified in his treatment of gymnastic; (ii) the four stages of education in the *Republic*; (iii) the Platonic conception of the influence of philosophy upon character and conduct.

SECTION B.

1. Contrast Plato's conception of virtue with that of Socrates on the one hand and of Aristotle on the other.

2. Give and criticise the different views which have been taken of the relations between the infinite and finite.

3. Discuss the relation between ordinary, scientific and philosophic thought.

4. Describe the chief characteristics of Intuitionist Ethical theories, and critically examine the assumption of a "moral sense," or moral faculty.

5. Can morality be shown to imply both the sacrifice and the realization of the Ego?

6. "The question of the freedom of man depends on the view taken of the nature of the object of desire." Explain and discuss this statement.

7. "An analysis of the nature of the moral end would show Hedonism to be untenable as a moral theory." Discuss this view.

8. How do the Stoics and Epicureans differ in their opinions as to the nature of man, and as to the life which is conformable to that nature?

9. How far is Kant justified in identifying moral good with duty?

10. "The Ego is at once the most inclusive and the most exclusive of all existences." Explain and illustrate with reference to the relation of man to society.

POLITICAL ECONOMY—THREE HOURS.

(Only EIGHT questions to be attempted; FOUR from each section.)

1. Is it correct to say that the law of diminishing returns applies to agriculture and that of increasing returns to manufacture?

2. Distinguish between gross and net interest and indicate the chief causes which have tended to bring about a fall in the rate of interest in recent times.

3. Explain the terms: marginal increment, marginal utility, marginal demand price, demand schedule.

4. "It is not correct to say that value is governed by marginal uses." "There is no margin of indifference between labour in general and material capital in general." Explain carefully.

5. "Wages depend on the demand and supply of labour." In what respects does labour differ from material commodities as regards the operation of the law of demand and supply?

6. Give some account of the economic aspects of (a) the Black Death, (b) the Navigation Acts.

SECTION II.

7. In what way would you justify Poor Relief? What are its chief dangers? Illustrate your answer from the history of the English Poor Law.

8. What are Index Numbers? Describe any with which you are familiar.

9. What are the difficulties in the way of framing a scientific tariff for Great Britain?

10. What is meant by (a) the Balance of Trade, (b) the Infant Industry argument for Protection?

11. Discuss the dangers resulting from the use of paper money and the means of preventing them.

12. Describe the functions of banks.

EDUCATION.

FIRST PAPER—THREE HOURS.

(Only SIX questions to be attempted—THREE from EACH section. The Examiners may reject any Candidate showing conspicuous weakness in EITHER section.)

A.

1. "We think of Education mainly as an intellectual process; the Greeks thought of it as a moral process." Illustrate these statements, discuss how far they represent the tendencies of the two systems, and criticise from the standpoint of an ideal system of education.

2. Give in outline the higher education of the Guardians as mapped out in the later books of the *Republic*.

3. Illustrate the important part played by Suggestion and Imitation in education, with special reference to the position of Plato.

4. Explain Aristotle's conception of Politics and trace its influence on his educational ideas.

B.

5. What should be the basal subject of education according to Thring and Spencer respectively? Give a summary of their arguments and criticise from the standpoint of an ideal Curriculum.

6. State and examine James's theory of the relation of Emotion to its physical expression, and discuss the question whether its acceptance would be of any practical value to the teacher.

7. Give the substance of Spencer's views on the teaching of Geometry and trace their influence in the recent reforms of geometrical teaching.

8. State and criticise Spencer's position in regard to the value of subjects as Knowledge and as Discipline respectively.

SECOND PAPER—THREE HOURS.

(Only SIX questions to be attempted—THREE from EACH section. The Examiners may reject any Candidate showing conspicuous weakness in EITHER section.)

A.

1. What are the arguments for the general educational value of the Sciences from the point of view of (a) Subject-matter, (b) Method?

2. To what extent does the importance of Interest in Education depend upon Herbart's doctrine of the precedence of Ideas over Volitions?

3. To what extent can the Subject-matter of Instruction be drawn from the life-activities of the child, and to what extent can this Subject-matter (or its outcome) be brought to bear directly on the life of the child? * Illustrate your answer in detail.

4. Write *brief* notes on the following:

(a) The place of the Heuristic Method in Education.

(b) The relation of the "Concentration" of Studies to many-sided Interest.

(c) The main processes involved in Imagination.

(d) The main causes of indistinct Concepts in children.

B.

5. What similarity exists between the educational activities and ideals of the Sophists and those of present-day educators?

6. In what respects are the educational aims and ideals of Comenius representative of (a) the Renaissance, (b) the Reformation, (c) the 17th Century Scientific, tendencies in thought?

7. Trace in outline the place held by (a) the Physical, (b) the Aesthetic, element in education from the ancient through the mediæval to the modern period.

8. Write *brief* notes on the following:

(a) The educational influence of Quintilian upon Sturm.

(b) The educational scheme of the First Book of Discipline.

(c) The features of early universities which distinguish them from schools previously in existence.

(d) The nature of the Nations in the mediæval Universities.

C.—DEPARTMENT OF SCIENCE.

MATHEMATICS.

FIRST PAPER—THREE HOURS.

(NOTE.—Candidates may obtain full marks by doing correctly about TWO-THIRDS of this paper.)

1. Prove that the three perpendiculars of a triangle are concurrent.

Prove that the circle which passes through the middle points of the sides of a triangle also passes through the feet of the perpendiculars and has a radius equal to one-half the circumradius of the triangle.

2. If I , I_1 , I_2 , I_3 are the in-centre and ex-centres of the triangle ABC , prove that the middle points of II_1 and I_2I_3 lie on the circumcircle of ABC .

Show that the power of the point I with respect to the circumcircle is $2Rr$; R , r being respectively the circumradius and in-radius.

3. State the conditions (i) regarding angles (ii) regarding sides which must be satisfied by two polygons which are similar; and show that if two *triangles* satisfy one set of conditions, they must satisfy the other.

AB and PQ are two straight lines which intersect at O , if produced towards B and P ; the circles APQ , BQO intersect again at X . Prove that the triangles XAB , XPQ are similar.

4. If $ABCD$ be a cyclic quadrilateral whose diagonals are AC and BD , prove that

$$AB \cdot CD + BC \cdot AD = AC \cdot BD.$$

If A, B, C, D are four collinear points, prove that the same relation holds true; and point out the connection between the two theorems.

5. If O, A, B be *any* three collinear points, prove that

$$AB = OB - OA,$$

under a convention to be clearly stated.

If A, B be any two points, and P lie anywhere on the line through them, and if AL, BM, PN be perpendiculars to any straight line, prove that

$$(m+n)PN = m \cdot AL + n \cdot BM,$$

where $n:m = AP:PB$. What formula in Analytical Geometry is the equivalent of this?

6. State the convention with regard to *signs* of areas in a plane. If A, B, C, D be any four fixed points, and O be a variable point in a plane, prove that

$$OAB + OBC + OCD + ODA$$

does not vary with the position of O .

If ABC be a triangle and G the middle point of BC , prove that

$$OAB + OAC = 2OAG,$$

where O is *any* point in the plane.

7. If A, B, C, D be four collinear points such that

$$AC:BC = -AD:BD,$$

prove that

$$\frac{1}{AC} + \frac{1}{AD} = \frac{2}{AB}.$$

OA, OB, OC, OD are four concurrent straight lines; through B a parallel to OA is drawn cutting OC in C' and OD in D' , such that B is the middle point of CD' ; show that any transversal is cut harmonically by the four lines OA, OB, OC, OD .

8. Prove that the locus of harmonic conjugates of a fixed point with respect to the extremities of chords of a fixed circle which pass through the point is a straight line.

A, B, C, D are four points on a circle, which are both the vertices of an inscribed quadrilateral and the points of contact of the sides of a circumscribed quadrilateral. Prove that the diagonals of the two quadrilaterals are concurrent.

9. Prove that the radical axis of two circles which do not meet must lie outside both of them, and that the radical axes of any three circles, taken in pairs, are concurrent. Mention special cases.

The medians from two of the vertices of a triangle are drawn, and circles are described on them as diameters. Prove that the third vertex of the triangle lies on the radical axis of the two circles. What line is the radical axis?

10. If from the three points in which a straight line cuts the sides of a triangle, perpendiculars to the sides are erected and meet in a point, prove that the point lies on the circumcircle of the triangle.

Prove that a point can always be found such that the feet of the perpendiculars from it to any four straight lines (no three of which are concurrent) are collinear.

11. Prove that the expression

$$\sqrt{\frac{1}{4}(x_1 - x_2)^2 + (y_1 - y_2)^2},$$

gives the distance between two points whose co-ordinates are (x_1, y_1) and (x_2, y_2) .

A, B, C are the points $(-1, 2), (3, 1), (1, -3)$; prove that the co-ordinates of G , the centroid of the triangle ABC , are $(1, 0)$ and show that

$$BC^2 + CA^2 + AB^2 = 3(GA^2 + GB^2 + GC^2).$$

12. Prove that the straight lines $y = mx + c$ and $y = m'x + c'$ are at right angles if $mm' = -1$; and show that the equation to the perpendicular to $ax + by + c = 0$ through the point (h, k) is given by the equation

$$b(x - h) - a(y - k) = 0.$$

Find the co-ordinates of the foot of the perpendicular from the point $(-2, -4)$ to the straight line $3x + 4y = 3$. Verify by a drawing.

13. Prove that the equation to a circle can be written in the form

$$x^2 + y^2 + 2gx + 2fy + c = 0.$$

What is the geometrical meaning of c ?

If A, B are the points $(-1, 2)$ and $(3, 4)$, and if P is a variable point in a fixed plane through AB such that

$$AP^2 + 2PB^2 = 15$$

find the equation of the locus of P , and show that it represents a circle whose centre is a point of trisection of AB .

MATHEMATICS.

SECOND PAPER—THREE HOURS.

(NOTE.—Candidates may obtain full marks by doing correctly about TWO-THIRDS of this paper.)

1. Express $ax^2 + 2hxy + by^2$ as the product of two real or imaginary factors of the first degree in x, y .

Show that $ax^2 + 2hxy + by^2 + 2gx + 2fy + c$ cannot in general be expressed as the product of two factors of the first degree in x, y ; determine c in order that

$$2x^2 + xy - y^2 - 3x + 3y + c$$

may have linear factors, and find the factors.

2. Define the ratio of A to B , where A and B are concrete quantities of the same kind.

If $a_1 : b_1 = a_2 : b_2 = a_3 : b_3 = \dots = a_n : b_n$, prove that each of these ratios is equal to

$$(a_1 + a_2 + a_3 + \dots + a_n) : (b_1 + b_2 + b_3 + \dots + b_n).$$

If a_1, a_2, \dots, a_n are in continued proportion, show that

$$a_n = a_2^{n-1} \cdot a_1^{2-n}.$$

3. Show, algebraically, that the equations

$$ax + by + c = 0,$$

$$Ax + By + C = 0,$$

have in general one and only one finite solution, and give a graphical explanation.

Show also that the system

$$ax^2 + 2hxy + by^2 = c,$$

$$Ax^2 + 2Hxy + By^2 = C,$$

can always be solved. Find the solutions of the system

$$\begin{aligned} x^2/y + y^2/x &= 2, \\ x + y &= 3. \end{aligned}$$

4. Show that if $ax^2 + bx + c$ vanishes for three different values of x , then $a=0$, $b=0$, $c=0$.

Prove that the equation

$$\frac{a^2(x-b)(x-c)}{(a-b)(a-c)} + \frac{b^2(x-c)(x-a)}{(b-c)(b-a)} + \frac{c^2(x-a)(x-b)}{(c-a)(c-b)} = x^2$$

is satisfied by all values of x .

5. Sum to n terms (i) the series whose n^{th} term is $an + b$, (ii) the series whose n^{th} term is $an^2 + bn + c$.

Find the sum to infinity of the series

$$1 - \frac{3}{2} + \frac{5}{2^2} - \frac{7}{2^3} + \dots,$$

stating what is meant by "sum to infinity." Write down the n^{th} term of the series.

6. Prove that the number of selections of r things out of n different things is

$$\frac{n(n-1)(n-2) \dots (n-r+1)}{r!}.$$

Find the coefficient of a^3b^2c in $(a+b+c)^6$.

7. Prove the Binomial Theorem, when the index is a positive integer; and state the Theorem for the other cases.

For what values of x is the series

$$1 + \frac{1}{2}x + \frac{1 \cdot 3}{2 \cdot 4}x^2 + \frac{1 \cdot 3 \cdot 5}{2 \cdot 4 \cdot 6}x^3 + \dots$$

convergent? Find its sum to infinity when it is convergent.

8. Prove that

$$\log \frac{ab}{c} = \log a + \log b - \log c.$$

Calculate, by logarithms,

$$\sqrt[3]{(1.734)^6 + (1.41)^6}.$$

9. Define $\sin \theta$ and $\cos \theta$, when θ is any angle : and prove that

$$\sin \left(\frac{\pi}{2} + \theta \right) = \cos \theta ; \quad \cos \left(\frac{\pi}{2} + \theta \right) = -\sin \theta.$$

Show that

$$(\cos 1050^\circ - \cos 675^\circ)(\sin 1140^\circ - \sin 1305^\circ) = \cos^2 1200^\circ.$$

10. Prove, by projection, that

$$\cos (A + B) = \cos A \cos B - \sin A \sin B,$$

for all values of A and B .

Prove, preferably by projecting the sides of the triangle ABC order, that

$$(1) \quad a \cos \theta - b \cos (\theta - C) = c \cos (\theta + B),$$

where θ is any angle,

$$(2) \quad \frac{a \sin B - b \sin (B - C)}{a \cos B - b \cos (B - C)} = \tan 2B.$$

11. Prove that the area (Δ) of a triangle ABC is given by the expression $\sqrt{s(s-a)(s-b)(s-c)}$ and the in-radius (r) by Δ/s .

Express Δ in the terms of a, A, r .

12. Eliminate θ from the equations

$$x = \cos \theta + \cos 2\theta,$$

$$y = \sin \theta + \sin 2\theta.$$

13. (a) Calculate, by logarithms, the remaining angles and the area of the triangle ABC when

$$b = 24.8, \quad c = 19.6, \quad A = 48^\circ.$$

(b) Calculate, as nearly as your tables permit, the solution of the equation

$$3 \sin x + 4 \cos x = 2,$$

when $0^\circ < x < 180^\circ$.

NATURAL PHILOSOPHY.

FIRST PAPER—THREE HOURS.

(NOTE.—Do not attempt more than EIGHT of the following questions.)

1. When is a moving point said to have uniform acceleration? Can the acceleration be said to be uniform if the path is not a straight line?

A point moving on a straight line with uniform acceleration travels consecutive equal distances s in times t, t_1 respectively: show that its acceleration is

$$\frac{2s(t - t_1)}{t t_1(t + t_1)}.$$

2. Define the hodograph of a moving point P , and show that the acceleration of P coincides in magnitude and direction with the velocity of the corresponding point on the hodograph.

A point moves with constant speed v on a plane curve. Find its hodograph, and show that the average acceleration between two points A and B on the path, at a distance s apart, is $\frac{2v^2}{s} \sin \frac{\phi}{2}$, when ϕ is the angle between the normals at A and B .

3. Explain how the theorems of Pappus may be applied in finding the centroid of an arc of a curve, and of a plane area.

CAB is a triangle right-angled at C ; a cone is generated by the revolution of the triangle about the side BC ; show that the area of the surface of the cone is $\pi AB \cdot AC$, and the volume of the cone is $\frac{1}{3} \pi AC^2 \cdot CB$.

4. Show that, in simple harmonic motion, the acceleration is proportional to the distance from a fixed point and is directed towards that point.

A horizontal disc, with a mass m lying on it, is forced to perform simple harmonic vibrations of amplitude a and period T along a vertical line. Show that the mass does not remain in contact with the disc throughout the oscillation if

$$T < 2\pi \sqrt{\frac{a}{g}}.$$

5. Show that the velocity acquired by a particle in descending a smooth curve under the action of gravity depends only on the vertical distance descended.

A simple pendulum of length l is drawn aside from the vertical through an angle θ and then let go. Show that the stretching force in the thread will be equal to the weight when the inclination α to the vertical is given by $3 \cos \alpha = 1 + 2 \cos \theta$.

6. When is a force said to do work, and how is the work measured? Define the units of work and power (or activity).

A mass of 100 grammes slides from rest down a rough inclined plane 10 metres long. The slope gives a fall of 1 metre for 4 metres along the plane, and the velocity acquired is $\sqrt{300}$ g. Find the energy wasted in friction, and deduce the value of the frictional force, assuming it constant.

7. Show that the centroid of a system of particles acted on by external forces, and by their mutual actions, moves as if the whole mass of the system were concentrated there, and acted on by the external forces only.

A thin uniform rod of length l and mass m rotates uniformly n times per second in a horizontal plane about the end A . Show that the stretching force across a section distant x from A is $2\pi^2 n^2 m (l^2 - x^2)/l$.

8. Define the moment of inertia and radius of gyration of a body about an axis.

If I is the moment of inertia of a rigid body about an axis on which it is rotating with angular velocity ω prove that the kinetic energy is $\frac{1}{2} I \omega^2$.

A railway carriage the body of which weighs 12 tons run on six wheels. Each wheel weighs $\frac{1}{2}$ ton and has a radius of gyration of 1 foot, and a radius of 15 inches. Find by the energy method or otherwise the acceleration of the carriage on an incline of 1 in 100, neglecting resistances in which energy is wasted.

9. Explain how the law of gravitation is confirmed by observation of the period and radius of the orbit of the Moon about the Earth.

Taking the diameter of the sun as 880,000 miles, the radius of the Earth's orbit as 92,400,000 miles, and the time of describing it as 3.156×10^7 seconds, calculate the length of a pendulum which would beat seconds at the Sun's surface.

10. Prove that when a body is at rest in a fluid the resultant thrust on it is vertically upward, and is equal to the weight of fluid displaced.

A hydrometer of variable immersion consists of a weighted glass bulb with a uniform cylindrical stem above it. When the hydrometer floats in water of density 1 it is immersed to a mark *A* on the stem, and in liquid of density 0.8 to a mark *B*, above *A*. Calculate the density of a liquid in which half the length *AB* is immersed.

11. Show that the free surface of a heavy liquid at rest is a horizontal plane.

A level is made of a horizontal tube *PQ* of length *l* with short narrow open vertical tubes fitting into it at each end *P*, *Q*. All the tubes contain water. The level is placed on a table moving with acceleration *f* so that *PQ* is parallel to the acceleration. In which tube will the water stand higher? Show that the difference of level in the tubes is lf/g .

12. State Hooke's law and define Young's modulus.

A wire 3 metres long, and $\frac{1}{4}$ mm. in radius is stretched 4.5 mm. under a force of 5 kilograms. How much would a wire of the same material 2 metres long, $\frac{1}{2}$ mm. in radius be stretched by a force of 20 kilogrammes?

13. Describe the strain and stress which are commonly called "shearing strain" and "shearing stress." Define the modulus of rigidity.

OA, *OB*, *OC* are three edges of a cube, each 10 cm. long. By the application of a suitable stress *OA* is lengthened by .001 cm. and *OB* is shortened by the same amount, the solid retaining its rectangular form. How may forces be applied to produce this strain, and what are their magnitudes if the modulus of rigidity is 8×10^{10} dynes per sq. cm.?

SECOND PAPER—THREE HOURS.

(NOTE.—Candidates are requested not to attempt more than EIGHT of the following questions.)

1. Give a clear statement of what you understand by the term *temperature*. Illustrate by means of any analogies with which you may be acquainted.

Describe the construction and graduation of a mercury-in-glass thermometer, paying special attention to the placing of the fixed points.

2. What do you understand by calorimetry? Distinguish between calorimetry by mixture and calorimetry by latent heat.

One hundred grammes of steam taken at a temperature of 120°C . and atmospheric pressure are condensed in a calorimeter at 60°C . and yield 58,660 calories of heat; 100 grammes of steam taken at 150°C ., and dealt with in the same way, give 60,100 calories. Find the latent heat and the average specific heat for the steam.

3. A number of gases which have no chemical action on one another are mixed in a closed vessel. What law gives the pressure produced within the vessel? How may the law be experimentally verified?

How many grammes of aqueous vapour are there in a room 10 metres square and 5 metres high when the temperature is 15°C ., the barometric height 75 cms. and the dew-point 8°C .? [Pressure of aqueous vapour at 6°C . = 7.49 mm., at 9°C . = 8.57 mm.; 1 litre of dry air at 0°C . and under a pressure represented by a column of mercury 760 mm. high weighs 1.293 grammes.]

4. Describe the apparatus employed by Andrews in his determination of the isothermals of carbonic acid.

Describe and give sketches of the isothermal lines (*i.e.* lines of equal temperature) on the pressure-volume diagram (1) for a perfect gas, (2) for carbonic acid.

What information do the isothermal curves for a substance give us as to the relation of the liquid and the gaseous states?

5. Define conductivity of a material for heat. Describe a method suitable for the determination of the conductivity of a slab of material.

In an experiment, using the guard-ring method, the thermo-couples placed at a distance apart of 15 cms. indicated a difference of temperature of 20°C . The central portion was of circular section of radius 5 cms. Find the heat which was conducted through the central portion in one hour, the conductivity of the material being 0.38.

6. Give some account of the phenomenon of resonance illustrating by an example from ordinary dynamics of a particle.

A tuning fork is held over a tube, the length of which can be varied. It is found that when the effective length of the tube is 33 cms. the intensity of the sound becomes a maximum. Given that the velocity of sound for the temperature of the room is 340 metres per second, deduce the vibrational frequency of the fork.

7. A wire 50 centimetres long is under a stretching force of 9 kilogrammes weight. When plucked aside in the middle and let go its fundamental note is found to be C (256 vibrations per second). Find the mass of 10 metres of the wire.

8. State the elementary laws of reflection and refraction of light. Show how total reflection occurs when a ray passes from a transparent medium to the surface of a second which is optically less dense.

What is meant by a total reflection prism? How would you employ such a prism

(1) to deviate a ray through 180° ?

(2) as an erecting prism?

Illustrate by means of diagrams.

9. D and E are two points in which the principal axis meets the two faces of a double convex lens, and O is a point between them such that $OE/OD = R/R'$ where R and R' are the radii of curvature of the respective faces. Show that a ray in the lens, whose direction after emergence is parallel to its direction before entrance, passes through O .

Where is O in the case where one of the radii is infinite, (i) that is when the lens is plano-convex, (ii) when R and R' have the same sign?

10. Prove the formula $\frac{1}{v} - \frac{1}{u} = (\mu - 1) \left(\frac{1}{R_1} - \frac{1}{R_2} \right)$ for refraction through a lens, stating clearly the conventions adopted as to signs.

A compound lens is made up of a double convex lens, the radii of curvature of the two surfaces of which are 8 and 10 centimetres, placed in contact with a double concave lens having surfaces of radii 12 and 15 centimetres. Find the focal length of the combination. Does it act as a convex or as a concave lens? ($\mu = 1.5$.)

11. Describe, with the aid of careful diagrams, the action of

(i) the telescope,

(ii) the compound microscope.

12. Define Electric Potential and Electrostatic Capacity.

An insulated metal sphere of radius 10 centimetres is charged to a potential of 150 electrostatic units of potential. What is the charge on the sphere, and the work in ergs expended in charging it?

The sphere is now connected by a fine wire to an insulated sphere of radius 20 centimetres. Find the common potential and the charge on each sphere.

What amount of energy has been lost and what has become of it?

13. What is meant by the horizontal intensity of the earth's magnetic field? Describe, in some detail, how you would set about determining this quantity for a particular place.

A magnet, horizontally suspended by means of a torsionless fibre, is found to have a period of 3 seconds when set into vibration at a station where the horizontal field intensity is 1.54 C.G.S. units: when vibrated at a second station its period is found to be 2.75 seconds. Find the value of the horizontal field intensity at the second station.

14. State Ohm's law for a homogeneous circuit, and show how the law may be extended to the case of a circuit composed of a wire and a two fluid cell—say a Daniell's cell.

15. Describe Oersted's experiment showing the effect of a current upon a horizontally suspended magnetic needle.

Give an expression for the magnetic force produced at a point P by an element of a current-carrying conductor. State also the direction of the force. Hence find, in amount and direction, the force produced at the centre of a circular coil carrying a current, and use your result to define unit current.

16. One hundred voltaic cells, each of which has an E.M.F. of 1 volt and an internal resistance of 2 ohms, are available for supplying a current in a coil of resistance 50 ohms. Find the current produced with each of the following arrangements :

- (1) all the cells in series ;
- (2) the cells arranged in two batteries working in parallel through the resistance, each battery consisting of 50 cells in series ;
- (3) the cells arranged in four equal batteries working in parallel through the resistance.

Show that the current produced with the second arrangement is the greatest obtainable. What arrangement would you propose if the coil had a resistance of, say, 2000 ohms ?

CHEMISTRY.

*(Candidates in ENGINEERING answer FOUR questions. Time—Two hours.
All other Candidates answer FIVE questions. Time—Three hours.)*

1. A mixture of 100 c.cs. of air with 65 c.cs. of hydrogen is exploded by means of an electric spark : the volume of the resulting mixture when cooled to the original temperature is 102 c.cs. Assuming air to contain only oxygen and nitrogen calculate its percentage composition. Mention the principal minor constituents of the atmosphere and discuss the causes which influence the proportion in which they occur.

2. Explain what happens when a current of electricity is passed through solutions of (a) copper sulphate, (b) ferrous sulphate, (c) ferric chloride, (d) sodium chloride. An electric current passing through a solution of copper sulphate deposits 3.175 grs. of copper : how much iron would be separated from solutions of ferrous and ferric chloride by a current of the same strength in the same time ? $\text{Cu} = 63.5$, $\text{Fe} = 56$.

3. Mention the chief naturally occurring compounds of Zinc and describe the method of extracting the metal from its ores. State the properties and uses of Zinc and explain the action of caustic potash and the commoner acids on it, giving equations.

4. Describe the ammonia-soda process for the manufacture of sodium carbonate. State the properties and uses of sodium carbonate.

5. Starting from sodium nitrate state how you would prepare potassium nitrate directly and copper nitrate indirectly. What do you know of the solubility of the nitrates in water, their behaviour towards heat, and of the methods of identifying a nitrate ?

ASTRONOMY—See p. 603.

GEOLOGY—See p. 608.

BOTANY—See p. 644.

ZOOLOGY—See p. 645.

D.—DEPARTMENT OF HISTORY AND LAW.

BRITISH HISTORY.

FIRST PAPER—THREE HOURS.

(At least TWO from each division ; not more than EIGHT in all.)

A. 1. In what ways did Roman civilization leave permanent results upon British history?

2. "Early history is pre-eminently Church history." Explain and illustrate this remark.

3. Compare the claims of Alfred and Canute to be called great kings.

4. Show how old English institutions were used and developed by the first three Norman kings.

B. 5. How was Scottish history influenced by England from 1066 to 1216? Add a sketch map of Scotland in the period.

6. Sum up the measures of Henry II. for the better administration of justice.

7. What would you select as the most striking points in Magna Carta?

8. Discuss the constitutional aims of the baronage, (a) in relation to Simon de Montfort, 1258-65; (b) in relation to Edward I.

C. 9. How was the Church affected by :

(1) The Mortmain Statute 1279;

(2) The creation of a representative Parliament 1295;

(3) The Statutes of Provisors and Praemunire under Edward III.

10. Describe the signs in the fourteenth century, *either* of a growing national unity in England, *or* of the growing importance of commerce.

11. Compare the causes of the deposition of Richard II. and Henry VI.

12. What was the constitutional importance of the reign of Henry IV.?

13. What characters in Scottish history most resemble any *one* of the following: Henry V., Warwick the King-Maker, Richard III.?

SECOND PAPER—THREE HOURS.

(At least TWO from each division ; not more than EIGHT in all.)

A. 1. What new influences entered England in the reign of Henry VII.?

2. *Either*, (1) compare the first stages of the Scottish and English Reformations; *or*, (2) compare Oliver Cromwell with John Knox as religious leaders.

3. Contrast the foreign policy pursued under Wolsey and under Burleigh (William Cecil).

4. Compare the way in which Henry VIII. and Elizabeth handled Parliament.

B. 5. Which of the difficulties of James I. were of his own making?

6. Explain the exact legal points in the cases of Bate, Darnell (The Five Knights), Hampden (Ship-money), Strafford's trial.

7. Trace the growing hostility between Scots and English from Marston Moor to Worcester.

8. Estimate the political character *either* of Shaftesbury, *or* of Marlborough.

C. 9. Trace the causes which went to produce Jacobite discontent 1688-1715.

10. Illustrate with sketch-maps the growth of the British Empire from the Peace of Utrecht to the Peace of Paris.

11. Sum up the growth of the Cabinet system from the accession of William III. to the death of Pitt in 1806.

12. Estimate the share taken by Wellington and Nelson respectively in defeating Napoleon's plans.

13. What is meant by the industrial revolution of the eighteenth century? *Or* sketch the movement for Parliamentary reform 1810-1832.

CONSTITUTIONAL LAW AND HISTORY—See p. 657.

ROMAN LAW—See Civil Law, p. 650.

II. FOR DEGREE WITH HONOURS.

(And for Snell Exhibition, April, 1906.)

A.—GROUP OF CLASSICS.

LATIN TRANSLATION—THREE HOURS.

1. Translate, according to your profession :

(a) VIRGIL, *Georg.* ii. 298—311.

(b) VIRGIL, *Aen.* v. 719—731.

(c) HORACE, *Sat.* i. 6. 68—80.

(d) *Either* LUCRETIVUS, ii. 308—322, *or* LUCRETIVUS, iii. 713—729, *or* PLAUTUS, *Captivi*, 653—673.

(e) JUVENAL, x. 250—264.

(f) PERSIUS, iii. 44—55, *and* MARTIAL, vii. 31.

(g) CATULLUS, lxxvi. 1—16, *and* PROPERTIUS, iii. 11. 1—16.

(h) CICERO, *Philippics*, v. c. 16. §§ 42, 43, *or* CICERO, *Ep. ad Fam.* vii. 24.

(i) LIVY, ii. c. 59. §§ 1—4, *or* LIVY, xxi. c. 53. §§ 1—5.

(j) TACITUS, xii. 41.

LATIN PROSE—THREE HOURS.

At the last interview I had with the Grand Vizir, after concluding my business, the Vizir dismissed his attendants, and coming close to me, he said that he suspected the so-called English merchants to be Persian Ambassadors in disguise; that on board one of the ships had been found a quantity of dollars; these he had seized and summoned the English to appear before him. He asked me to tell him if I knew anything about it. I said that if I had heard anything on the subject I would have informed him, but that all I knew about it was what his Lordship himself had told me. Next day the English Ambassador waited on the Vizir. With him were all the English merchants. The Ambassador endeavoured to make the Vizir understand that the money was his own private property. The Vizir would not believe it. He grew hot on the topic, and the Ambassador answered him boldly in his defence; some ugly language passed between them, till at last both rose and turned their backs on each other without saluting. The Vizir would not receive the Ambassador at the usual place, but, after keeping him waiting four hours, he went out to the outer pavilion where the servants stay. At the close of the altercation the Pasha called two cavasses and bade them take the chest of dollars to the merchantman. He sent the Cadi of Constantinople to the ship and made him open the chest and take a note of the contents. He also made him carefully search the ship, and then ordered the chest and everything else to be brought to his camp. This was done; and there the matter rests, with great resentment on both sides.

LATIN GENERAL PAPER—TWO HOURS.

A. UNPREPARED TRANSLATIONS.

Translate:

(a)

Ut in aequore summo

Umbra viri visa est, visam fera saevit in umbram.

Utque Iovis praepes, vacuo cum vidit in arvo

Praebentem Phoebos liventia terga draconem,

Occupat aversum: neu saeva retorqueat ora,

Squamigeris avidos figit cervicibus ungues:

Sic celeri fissum praeceps per inane volatu

Terga ferae pressit, dextroque frementis in armis

Inachides ferrum curvo tenus abdidit hamo.

Vulnere laesa gravi modo se sublimis in auras

Attollit: modo subdit aquis: modo more ferocis

Versat apri, quem turba canum circumsona terret.

Ille avidos morsus velocibus effugit alis:

Quaque patent, nunc terga cavis super obsita conchis,

Nunc laterum costas, nunc qua tenuissima cauda

Desinit in piscem, falcato vulnerat ense.

(b) Non est ita, iudices, non est profecto. Vidi ego in quodam iudicio nuper Philodorum testem Trallianum, vidi Parrhasium, vidi Archidemum, cum quidem idem hic mihi Maeandrius quasi ministrator aderat, subiciens quid in suos civis civitatemque, si vellem, dicerem. Nihil enim illo homine levius, nihil egentius, nihil inquinatius. Qua re si hunc habent auctorem Tralliani doloris sui, si hunc custodem litterarum, si hunc testem iniuriæ, si hunc auctorem querellarum, remittant spiritus, comprimant animos suos, sedent adrogantiam, fateantur in Maeandrii persona esse expressam speciem civitatis: sin istum semper illi ipsi domi proterendum et conculcandum putaverunt, desinant putare auctoritatem esse in eo testimonio, cuius auctor inventus est nemo. Sed exponam quid in re sit, ut quam ob rem ista civitas neque vere Flaccum oppugnavit neque benigne defenderit scire possitis: erat Castriciano nomine irata, de quo toto respondit Hortensius: invita solverat Castricio pecuniam iam diu debitam. Hinc totum odium, hinc omnis offensio.

B. HISTORY AND LITERATURE.

(Not more than FIVE questions should be attempted.)

1. Account for the rapid decay of Latin poetry after Juvenal.
2. Estimate Horace's merits as a lyricist.
3. Write a *short* account of the following—Calvus, Velleius Paterculus, Columella, Varro, Sallust, Silius Italicus, Fronto.
4. Compare the Imperial with the Republican administration of the provinces.
5. Discuss Martial's poetical gifts.
6. Do you think that the survival of so much Latin elegy is justified by its intrinsic value?
7. Contrast, as statesmen, the dictator Julius and the Emperor Augustus.
8. "Graecia capta ferum victorem cepit." How far was this conquest complete?

GREEK TRANSLATION—THREE HOURS.

A. PRESCRIBED BOOKS.

Translate into English:

- (a) *Iliad*, XVI. 364—379.
- (b) *Odyssey*, XIV. 285—300.
- (c) *Agamemnon*, 1505—1529.
- (d) *Antigone*, 724—740.
- (e) Either HERODOTUS, VII. 52 and 53, or THUCYDIDES, I. 68.
- (f) Either PLATO, *Phaedo*, 94 B—D, or *Republic*, 439 E—440 E.
- (g) Either ARISTOTLE, *Poetics*, c. 8, or *Politics*, I. c. 12.

B. OPTIONAL BOOKS.

Translate according to your profession :

1. THEOGNIS, 1003—1022. Discuss the reading in 1015.
2. AESCHYLUS: (a) *Eumenides*, 644—661. ὦ παντομισῇ . . . βλάβῃ θεῶς. 428—433. Explain εὐθείαν δίκην.
- (b) *Prometheus Vinctus*, 613—629. Discuss the reading μάσσον ὡς ἐμοὶ γλυκύ.
3. SOPHOCLES: (a) *Oedipus Rex*, 1237—1250. 44—5. Explain.
- (b) *Oedipus Coloneus*, 937—955. Illustrate Sophocles' view of θυμός (954) from his other plays.
- (c) *Philoctetes*, 1003—1019. 108—109. Which is Sophocles' opinion?
- (d) *Trachiniae*, 1046—1058. 517—530.
4. EURIPIDES: *Medea*, 523—541. 856—859. Discuss the reading.
5. ARISTOPHANES: *Acharnenses*, 496—512. Explain 502—4.
6. DEMOSTHENES: (a) *de Corona*, 261—264 inclusive (314). Explain the comparison ὥσπερ ὀπωρώνης.
- (b) *de Falsa Legatione*, 192—195. Ending at παθεῖν τι καὶ δοῦναι.
- (c) *In Aristocratem*, 95—97 inclusive. Explain καταρᾶται . . . ὁ κῆρυξ.
7. APOLLONIUS RHODIUS, III. 401—421.

GREEK COMPOSITION AND UNPREPARED TRANSLATION.

THREE HOURS.

1. Translate into Greek :

Francis Drake, the Englishman, having done whatever he liked, appeared at Setimbra. A large number of troops came to the rescue, and he, without doing anything, passed on to Cascaes, where, had he not found the galleys, he was resolved to land eighteen companies, and to sack and burn the place. His plan was upset by the sight of the galleys and the troops which Don Alonso de Bazan disembarked for the defence of the place. Drake made several feints, but not trusting the great calm, that same night he weighed anchor and drew out to the open sea. He sailed before a north breeze, which sprang up yesterday after midnight, and they think he is gone to Cape St. Vincent again for shelter.

Yesterday, before daybreak, they came to wake me with letters and news that a fleet of two hundred sail was coming up from the south-east to join Drake. Then we heard that these were one hundred and fifty French ships coming into Setubal for salt. Drake seized two, and sailed with the north wind. It is to be feared that he will land at some place in Algarve, for nothing more has been seen of him here. Here every preparation has been made and at Setimbra: also at Cascaes, where there are many foot soldiers and cavalry.

2. Translate into English :

(α) "Ὡς ἄρ' ἔφη· τοὺς δ' εἶθαρ ἔλεν δέος εἰσαίοντας.
δὴν δ' ἔσαν ἀμφασίῃ βεβολημένοι· ὁψὲ δ' ἔειπεν
ἦρως Αἴσονος υἱὸς ἀμυχανέων κακότητι.

"Ὡ γέρον, ἥδη μὲν τε δίκαιο πείρατ' ἀέθλων
ναυτιλῆς καὶ τέκμαρ, ὅτῳ στυγεράς διὰ πέτρας
πειθόμενοι Πόντονδε περήσομεν· εἰ δὲ καὶ αὖτις
τάσδ' ἡμῖν προφυγούσιν ἐς Ἑλλάδα νόστος ὀπίσσω
ἔσσεται, ἀσπαστῶς κε παρὰ σέο καὶ τὸ δαεῖν.
πῶς ἔρδω, πῶς αὖτε τύσην ἀλὸς εἴμι κέλευθον,
νῆϊς ἑὼν ἐτάροις ἅμα νῆϊσιν ; Αἶα δὲ Κολχίς
Πόντου καὶ γαίης ἐπικέκλιται ἐσχατίησιν."

"Ὡς φάτο· τὸν δ' ὁ γεραιὸς ἀμειβόμενος προσέειπεν·
"Ὡ τέκος, εὖτ' ἂν πρῶτα φύγῃς ὀλοὰς διὰ πέτρας.
θάρασει· ἐπεὶ δαίμων ἕτερον πλὸν ἡγεμονεύσει
ἐξ Αἴης· μετὰ δ' Αἶαν ἄλις πομπῆς ἔσονται.
ἀλλὰ, φίλοι, φράζεσθε θεὰς δολόεσσας ἀρωγῇν
Κύπριδος· ἐκ γὰρ τῆς κλυτὰ πείρατα κείμεν ἀέθλων.
καὶ δέ με μηκέτι τῶνδε περαιτέρω ἐξερέεσθε."

(b) 'ΑΛΛ' ὅτι μὲν τέχνη ἐστὶν ἡ παρασιτική, καὶ τούτων καὶ τῶν ἄλλων
ικανῶς δέδεικται. λοιπὸν ὅτι καὶ ἀρίστη δεκτέον, καὶ τοῦτο οὐχ ἁπλῶς, ἀλλὰ
πρῶτον μὲν, ὅτι κοινῇ πασῶν διαφέρει τῶν τεχνῶν, εἰτα ὅτι καὶ ἰδίᾳ ἐκάστης.
κοινῇ μὲν οὖν ἀπασῶν οὕτω διαφέρει· πάσης γὰρ τέχνης ἀνάγκη προσάγειν
μάθησιν πόνον φόβον πληγὰς, ἅπερ οὐκ ἔστιν ὅστις οὐκ ἂν ἀπεύξαιτο· ταύτην
δὲ τὴν τέχνην, ὡς ἔοικε, μόνην ἔξεστι μαθεῖν ἀνεὺ πόνου. τίς γὰρ ἀπὸ δειπνου
ποτέ ἀπῆλθε κλαῖων. ὥσπερ τινὰς ἐκ τῶν διδασκαλείων ὀρώμεν, τίς δ' ἐπὶ
δειπνον ἀπὼν ὠφθῇ σκυθρωπός, ὥσπερ οἱ εἰς τὰ διδασκαλεῖα φοιτῶντες ; καὶ
μὴν ὁ μὲν παράσιτος ἐκὼν αὐτὸς ἐπὶ δειπνον ἔρχεται μάλα ἐπιθυμῶν τῆς τέχνης,
οἱ δὲ τὰς ἄλλας τέχνας μαθάνοντες μισοῦσιν αὐτάς, ὥστε ἔνιοι δι' αὐτάς
ἀποδιδράσκουσι. τί δέ, οἱ κακείμενοί ἐννοῶσιν αὐτὰς, ὅτι καὶ τοὺς ἐν ἐκείναις
ταῖς τέχναις προκύπτοντας οἱ πατέρες καὶ μητέρες τοῖτοισι τιμῶσι μάλιστα, οἷς
καθ' ἡμέραν καὶ τὸν παράσιτον ; Καλῶς νῆ Δί' ἔγραψεν ὁ παῖς, λέγοντες, δότε
αὐτῷ φαγεῖν· οὐκ ἔγραψεν ὀρθῶς, μὴ δῶτε. οὕτω τὸ πρᾶγμα καὶ ἐντιμον καὶ ἐν
τιμωρίᾳ μέγα φαίνεται.

GREEK GENERAL PAPER—Two Hours.

(Not more than six questions need be attempted.)

1. κλῦθι ἄναξ, ὅς που Λυκίης ἐν πίονι δήμῳ
εἰς ἣ ἐνὶ Τροίῃ· δύνασαι δὲ σὺ πάντοσ' ἀκούειν
ἀνέρι κηδομένῳ.

In this passage explain and illustrate (1) the hiatus in κλῦθι ἄναξ, (2) the construction ἀνέρι κηδομένῳ, (3) the practice of invoking Gods by their residences ; and weigh the claims of πάντοσ' ἀκούειν, Zenodotus' lection πάντ' ἑσκαοῖεν, and another variant πάντοθ' ἀκούειν.

2. Οἷη δ' Ἄρτεμις εἰσι κατ' οὔρεος ἰοχέαιρα
ἢ κατὰ Τηύγετον περιμήκετον ἢ Ἐρίμανθον—

From this passage and other geographical allusions in the *Iliad* and *Odyssey* (quote as many as you remember) what conclusion may be drawn as to the birthplace of Homer ?

3. Discuss from a Greek point of view the respective moral positions of Clytemnestra and Orestes.

4. "Ἔρως ἀνίκαστε μάχην κτλ.

Discuss the relevance of this ode to the general story of the Antigone.

5. How far is Thucydides' view of the origins and early stages of his own race in harmony with modern research?

6. In what respects (other than language) is Herodotus un-Attic?

7. Write a short comment on one of the following Aristotelian dicta:

(a) φανερόν ὅτι οὐκ ἔστιν ἡ αὐτὴ σωφροσύνη ἀνδρὸς καὶ γυναικός, οὐδ' ἀνδρεία καὶ δικαιοσύνη, καθάπερ ᾤετο Σωκράτης.

(b) λέξεως ἀρετὴ σαφὴ καὶ μὴ ταπεινὴ εἶναι.

8. How far is the Dialogue form essential to Plato's thought?

Does his Philosophy admit of being presented as a whole?

9. Compare, in their main characteristics, Alexandrian with Attic literature.

10. What qualities in the Attic orators justify their survival and study?

11. Trace the advance of the Macedonian power in Greece.

12. Give some account of the history of Syracuse in the 6th and 5th centuries B.C.

13. What is the scope of Athenaeus' *Deipnosophistae*?

B.—GROUP OF MENTAL PHILOSOPHY.

LOGIC.

FIRST PAPER—THREE HOURS.

(Not less than SIX questions to be attempted.)

1. Note any characteristic features in Greek life and its conditions that seem to you of significance in connection with the rise of philosophic reflection. How would you interpret the term *φυσικοί* as applied to the early Greek thinkers?

2. Explain what you take to be implied in Anaximander's conception of *ἄπειρον*, and refer to any difference of opinion that prevails in regard to its interpretation. In what respect did the Pythagorean conception of *ἄπειρον* deviate from that of Anaximander?

3. Give an account of the theory of sense-perception advanced by Empedocles, and point out its importance in subsequent speculation. Compare the theory of perception adopted by Anaxagoras.

4. State precisely the implications of the Protagorean maxim: *πάντων χρημάτων μέτρον ἄνθρωπος*. Bring out clearly what appears to have been the position of Socrates in regard to it.

5. Describe the chief features of the Socratic method of Dialectic, and distinguish its use as a destructive and as a constructive process of argument.

6. How does Plato account for the origin of the philosophic impulse, and what position does he assign to philosophy relatively to the special sciences? Compare on the latter point Plato's view of Dialectic with Aristotle's conception of First Philosophy.

7. Express clearly the characteristic features of the Theory of Ideas when offered as a solution (*a*) of the problem of Knowledge, and (*b*) of the problem of Existence. Consider the relation of the Ideas to Sense Particulars.

8. "In the *Timaeus*, Plato teaches that the entire universe is the self-evolution of absolute intelligence, which is the same as absolute good." Explain and critically examine this interpretation of Platonic doctrine.

9. Examine critically the objections urged by Aristotle against the Platonic theory of Ideas. Indicate any features in Aristotle's own philosophy that seem to you open to similar lines of criticism.

SECOND PAPER—THREE HOURS.

(Not less than SIX questions to be attempted, of which FOUR must be taken from Section A and TWO from Section B.)

SECTION A.

1. Determine carefully the significance attached by Kant to the term "transcendental," and shew in what respects a transcendental investigation of knowledge differs (*a*) from an empirical and (*b*) from a rationalistic investigation.

2. Trace the steps of the argument by which Kant seeks to prove that (*a*) the experience of objects involves the unity of self-consciousness, (*b*) the subject becomes aware of its own unity through the notion of an object.

3. Explain Kant's distinction between regulative and constitutive principles in knowledge and discuss its value and consistency.

4. Give a careful statement and consider the cogency of Kant's criticism of the Ontological Argument. Why does Kant hold that this is the only fundamental argument for the existence of God?

5. Compare critically the final position of Kant's metaphysic with that of Leibniz.

6. Consider the grounds on which it has been maintained (*a*) that presentations are not subjective modifications but *objects* or changes in an *objective* continuum, and (*b*) that feelings are subjective modifications and as such cannot be presented.

SECTION B.

7. "Self-consciousness in the philosophy of Leibniz is a very different thing from self-consciousness in the philosophy of Descartes."

Justify this statement by a careful comparison of the two views.

8. What do you understand by the doctrine of representative ideas? Indicate the part it played in Descartes's theory of knowledge, the discussions it occasioned in the Cartesian school, and the form it assumed in the system of Leibniz.

9. Explain and discuss Spinoza's conceptions of *Causa sui* and *Deus sive natura*. Point out their relation (if any) to similar conceptions in the philosophy of Descartes.

10. Discuss carefully the difficulties attending Spinoza's notion of Attribute. What different interpretations have been given of the doctrine? Critically examine them.

11. *Omnis determinatio est negatio*. Shew the impossibility of interpreting Spinoza's philosophy as a whole in conformity with this maxim, and point to corresponding inconsistencies that come to the surface in the thought of Leibniz.

THIRD PAPER—TWO HOURS.

1. "Kant did well in declaring the synthetic unity of apperception to be the paramount principle of knowledge, but it is surely a mistake to suppose any synthesis, or any unity, possible, apart from motives to action and a practical interest in things." Discuss this.

2. "Reality is given for me *in* present sensuous perception and *in* the immediate feeling of my own sentient existence that goes with it." Explain and critically examine this statement.

3. Trace the growth of the conception of Self and shew the importance of this conception in the development of conscious experience generally.

4. By what psychological marks does Expectation seem to you to be distinguished from (a) Memory and (b) Imagination?

MORAL PHILOSOPHY.

FIRST PAPER—THREE HOURS.

1. Contrast the Aristotelian with the Utilitarian method of determining the nature of the Chief Good. What differences of result proceed from the difference in method?

2. What answer would Aristotle's theory enable him to make to the question: "Can a man sin against knowledge"? Examine its adequacy.

3. Investigate the Aristotelian doctrine of Pleasure, noting especially the relation of pleasure to Virtue and to the Good.

4. "Aristotle's exaltation of pure contemplation and Kant's exaltation of practical reason equally rest upon a false abstraction." Explain and discuss this statement.

5. "The moral life resolves itself in Spinoza's hands into a purely intellectual process." How far is this view just?

6. Criticise Spinoza's conception of human freedom and discuss his view as to the attitude of a free man (a) towards his non-human environment and (b) towards his fellow-men.

7. How does Kant connect the consciousness of freedom with the moral law? State and examine his treatment of the determination of rational beings by passion.

8. Discuss Kant's doctrine that "respect for the moral law is the only and undoubted moral motive," and compare it with Hume's account of the motive to virtuous action.

SECOND PAPER—THREE HOURS.

1. How does Green attempt to reconcile the presence in man of a timeless principle with the fact that the human consciousness grows and develops? Examine his argument.

2. Examine the objection urged against Green that he defines the moral good as that which satisfies the desire of a moral agent, and the moral agent as one who desires the moral good? Can a similar objection be made against Plato? Is it a valid objection?

3. What explanation does Hedonism offer of "Moral obligation," "Repentance," and "Punishment"? Does Hedonism imply Determinism?

4. "The individual alone is the true Universal." "Relations are valid but not real." Explain these statements and shew their bearing on recent controversies between Idealists.

5. "The truth of Necessity is Freedom." What does this mean? What light does it throw on the relation of man to nature and to society?

6. "The moral good must be absolute, but it cannot be the end of the moral agent because he cannot conceive the absolute." Discuss this statement.

7. What does Hume mean by calling Justice an "artificial virtue"? Compare his analysis of Justice with that of Mill or Sidgwick.

8. What is the relation of Truth and Goodness? Can either of them be made the criterion of the other, or do both conceptions involve ultimate contradictions?

THIRD PAPER—TWO HOURS.

1. How far can the State be regarded as a Moral Agent?

2. By what criteria according to Aristotle may the goodness or badness of the constitution of the State be determined? Estimate their adequacy.

3. "Political obligation rests on the idea of self-government." Explain and examine this view.

4. In what ways is the biological metaphor inapplicable to the State.

*C.—GROUP OF MATHEMATICS AND NATURAL
PHILOSOPHY.*

MATHEMATICS.

FIRST PAPER—THREE HOURS.

(NOTE.—Candidates are requested not to attempt more than NINE of the following questions.)

1. Find the condition that the lines given by the equation

$$ax^2 + 2hxy + by^2 = 0$$

may be harmonic conjugates with respect to the lines given by the equation

$$a'x^2 + 2h'xy + b'y^2 = 0.$$

The tangents from a variable point P to the circle $x^2 + y^2 + 2ax = 0$ are harmonic conjugates with respect to the tangents from P to the circle $x^2 + y^2 + 2by = 0$; prove that P lies on one or other of the straight lines

$$ax - by = \pm ab.$$

2. If a circle and a conic intersect in four points, prove that the chord joining any two of the points is inclined to the axis of the conic at the same angle as the chord joining the other two. What limiting result is obtained by making three of the points of intersection coincide?

Show that the locus of intersection of the chords of curvature at the extremities of conjugate semi-diameters of the ellipse $x^2/a^2 + y^2/b^2 = 1$ is

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 2 \left(\frac{xy}{ab} \right)^{\frac{2}{3}}.$$

3. Find the condition that the lines $y = mx + c$ and $y = m'x + c'$ should be parallel to a pair of conjugate diameters of the conic

$$ax^2 + 2hxy + by^2 + 2gx + 2fy + c = 0.$$

Through the vertices of a triangle ABC , AD , BE , CF are drawn so that the pairs of lines AD and BC , BE and CA , CF and AB are parallel to pairs of conjugate diameters of a fixed conic; prove that AD , BE , CF are concurrent.

4. Find the condition that the general equation of the second degree in trilinear co-ordinates should represent a rectangular hyperbola.

Prove that the centres of the four circles which touch the sides of the triangle of reference lie on every rectangular hyperbola with respect to which the triangle is self-conjugate.

5. Deduce by induction from the Addition Theorem in Trigonometry that

$$\cos(A_1 + A_2 + \dots + A_n) = K_n - K_{n-2} + K_{n-4} - \dots,$$

$$\sin(A_1 + A_2 + \dots + A_n) = K_{n-1} - K_{n-3} + K_{n-5} - \dots$$

where $K_r = \sum \cos A_1 \cdot \cos A_2 \dots \cos A_r \cdot \sin A_{r+1} \dots \sin A_n$.

Write down the value of the sum of (1) the cosines, (2) the sines of the angles $(A_1 \pm A_2 \pm A_3 \pm \dots \pm A_n)$, where the signs are to be taken in every possible order.

Establish rigorously, without using e , the power-series for $\cos \theta$, proving any limiting theorems you use.

6. Using the method of partial fractions, prove that

$$\frac{\cos^2 x}{\sin(x-a) \cdot \sin(x-b) \cdot \sin(x-c)} = \sum \frac{\cos^2 a}{\sin(a-b) \cdot \sin(a-c) \cdot \sin(x-a)},$$

and find the corresponding transformation for

$$\frac{\cos x}{\sin(x-a) \cdot \sin(x-b) \cdot \sin(x-c)}.$$

7. Give any rigorous proof that

$$e^x = 1 + x + \frac{x^2}{2!} + \dots \text{ad inf.},$$

where x is a real rational number; and deduce carefully the infinite series for $\log(1+x)$, when $-1 < x < 1$.

Sum to infinity the series

$$\frac{1^2}{1}x + \frac{1^2+2^2}{2!}x^2 + \dots + \frac{1^2+2^2+\dots+n^2}{n!}x^n + \dots$$

8. If $f(n) = 1 + \frac{1}{2} + \frac{1}{3} + \frac{1}{4} + \dots + \frac{1}{n} - \log n$,

prove that $f(n)$ tends to a definite limit as n tends to infinity.

Examine the convergency of the infinite series whose n^{th} term is

$$(i) \frac{1}{an+b}, \quad (ii) \frac{2+n}{n+n^2}.$$

9. Define $(a+ib)^{c+id}$. If $x+iy = (\cos \phi + i \sin \phi)^{c+id}$, prove that

$$x-iy = (\cos \phi + i \sin \phi)^{-c+id}.$$

If $w=e^z$, and the z -point moves along a straight line in the z -plane, making an angle α with the x -axis, prove that the path of the w -point is an equiangular spiral of angle α .

10. Explain the use of Newton's diagram of squares (or of the Analytical Triangle) for obtaining at any point the branches of an algebraic function.

Trace the curve $x^6 + 2a^2x^2y = a^3y^3$.

11. If the abscissae in which the algebraic curve $f(x, y) = 0$ is met by the line $y = tx$ are given by the equation

$$(t-t_1)^2 g_{n-2}(t) = \frac{1}{x} \cdot f_{n-1}(t) + \frac{1}{x^2} \cdot f_{n-2}(t),$$

where $g_{n-2}(t_1) \neq 0$ and $f_{n-1}(t_1) \neq 0$, discuss the form of the curve at infinity in the direction $y = t_1 x$.

Trace the curves

$$(i) \ x(x-y)^2 = a(x^2+y^2),$$

$$(ii) \ x(x-y)^2 = a(x^2-y^2) + 3a^2x.$$

12. Prove, for any spherical triangle, that

$$\frac{\sin A}{\sin a} = \frac{\sin B}{\sin b} = \frac{\sin C}{\sin c} = \frac{2u}{\sin a \sin b \sin c},$$

where $2u = \sqrt{(1 - \cos^2 a - \cos^2 b - \cos^2 c + 2 \cos a \cos b \cos c)}$.

An arc of a great circle is drawn through the vertex A of the spherical triangle ABC . If perpendiculars BP , CQ are drawn to this arc from B and C , prove that

$$\sin^2 b \sin^2 c + \sin^2 c \sin^2 y - 2 \sin b \sin c \sin x \sin y \cos A = \sin^2 A \sin^2 b \sin^2 c,$$

where $BP = x$, $CQ = y$.

13. Prove that in a spherical triangle

$$\tan \frac{1}{2}(A + B) = \frac{\cos \frac{1}{2}(a - b)}{\cos \frac{1}{2}(a + b)} \cot \frac{C}{2},$$

and show how a spherical triangle is completely solved by logarithms when a , b , C are given.

Find formulae for the determination of the area of the triangle given by a , b , C in a form suitable for logarithmic computation.

SECOND PAPER—THREE HOURS.

(NOTE.—Candidates are requested not to attempt more than NINE of the following questions.)

1. Find $\text{Lt}_{x \rightarrow 1} \frac{(x^n - 1)^p - (x^n - 1)^q}{(x - 1)^p - (x - 1)^q}$, without using the Binomial Theorem for an index which is not a positive integer.

When is a differential coefficient of a function of x said to be *definite* for $x = x_1$? Prove the Mean Value Theorem and show how its application can be repeated to give Taylor's Theorem.

2. If $x = e^\theta$, prove that

$$x^n D^n . y = \delta(\delta - 1) \dots (\delta - n + 1) . y,$$

D , δ denoting the operators $\frac{d}{dx}$, $\frac{d}{d\theta}$ respectively.

Establish the identity

$$D^n . (\delta^k . y) = (\delta + n)^k . (D^n . y).$$

3. Prove, under conditions to be clearly stated, that

$$\frac{\partial^2 f}{\partial x \partial y} = \frac{\partial^2 f}{\partial y \partial x}.$$

If $u = f_1(x, y)$ and $v = f_2(x, y)$, prove that

$$\left(\frac{\partial x}{\partial u} \cdot \frac{\partial y}{\partial v} - \frac{\partial x}{\partial v} \cdot \frac{\partial y}{\partial u} \right) \left(\frac{\partial u}{\partial x} \cdot \frac{\partial v}{\partial y} - \frac{\partial u}{\partial y} \cdot \frac{\partial v}{\partial x} \right) = 1.$$

4. From the general analytical definition of $\int_a^b f(x) dx$, deduce that

$$\int_a^b f(x) dx = \psi(b) - \psi(a),$$

where $\frac{d\psi}{dx} = f(x)$; pointing out what restrictions are imposed on $\psi(a)$ and $\psi(b)$ when $\psi(x)$ is a many-valued function of x .

Assuming $\sqrt[n]{n} = 2^{\frac{n-1}{2}} \cdot \sin \frac{\pi}{n} \sin \frac{2\pi}{n} \dots \sin \frac{(n-1)\pi}{2n}$ (n odd),

find $\int_0^{\frac{\pi}{2}} \log(\sin x) \cdot dx$ from the definition, and verify your result by evaluating the integral any other way.

5. Discuss the transformation

$$\int_a^b f(x) \cdot dx = \int_a^\beta f\{\phi(t)\} \cdot \phi'(t) \cdot dt,$$

where $a = \phi(a)$, $b = \phi(\beta)$ and the function $\phi(t)$ is continuous in the range $t = a$ to $t = \beta$. Take $f(x)$ to be a one-valued function of x .

Prove that $\int_0^x f\left(ax + \frac{b}{x}\right) \cdot dx = \frac{1}{a} \int_{2\sqrt{ab}}^x f(t) \cdot \frac{t dt}{\sqrt{t^2 - 4ab}}$.

6. Evaluate the following integrals :

$$\int \frac{(x+1)}{(x^2+3x+4)^2} dx, \quad \int \frac{\cos \theta d\theta}{\cos 5\theta}, \quad \int_0^{\frac{\pi}{2}} \cos 4x \cdot \cos^4 x dx.$$

7. If $R = ax^2 + 2bx + c$, prove that any rational function of x and \sqrt{R} can be written in the form $A + B\sqrt{R}$, where A, B are rational functions of x , and show that $\int B\sqrt{R} \cdot dx$ depends on integrating functions of the types x^m/\sqrt{R} ,

$$1/(x-p)^n \sqrt{R} \quad \text{and} \quad (Lx+M)/(Ax^2+2Bx+C)^n \sqrt{R}, \quad (B^2 < AC).$$

Reduce $\int \frac{x^2}{\sqrt{ax^2+2bx+c}}$ to dependence on $\int \frac{dx}{\sqrt{ax^2+2bx+c}}$.

8. If u, v are one-valued continuous functions of x and y at all points within and on the boundary of a closed curve in the xy -plane, prove that

$$\int (u dx + v dy) = \iint \left(\frac{\partial v}{\partial x} - \frac{\partial u}{\partial y} \right) dx dy.$$

Show by a similar method that if U , V , W are one-valued finite and continuous functions of x , y , z at points within and on a closed surface,

$$\int \int (lU + mV + nW) dS = \int \int \int \left(\frac{\partial U}{\partial x} + \frac{\partial V}{\partial y} + \frac{\partial W}{\partial z} \right) dx dy dz,$$

l , m , n being the direction-cosines of the outward drawn normal to the surface at the point (x, y, z) on the surface; and deduce Green's Theorem.

9. If
$$u = \int_a^b f(c, x) \cdot dx,$$

prove that

$$\frac{\partial u}{\partial c} = \int_a^b \frac{\partial f}{\partial c} \cdot dx,$$

pointing out the necessary conditions.

Hence show that

$$\int_0^x \frac{\tan^{-1}(ax)}{x(1+x^2)} dx = \frac{\pi}{2} \cdot \log(a+1),$$

where a is positive. Write down the value of the integral when a is negative.

10. If A , B are the points (x_1, y_1, z_1) , (x_2, y_2, z_2) , find (preferably by projecting the triangle OAB on the yz -, zx -, xy -planes) the equation of the plane OAB .

If normals at the points where a line meets the surface

$$x^2/a^2 + y^2/b^2 + z^2/c^2 = 1$$

intersect, the normals at the points where it meets the surface

$$x^2/(a^2 + \lambda) + y^2/(b^2 + \lambda) + z^2/(c^2 + \lambda) = 1$$

also intersect.

11. Find the perpendicular distance of the point (a, β, γ) from the straight line which passes through the point (a, b, c) and whose direction-cosines are l, m, n .

Prove that the locus of a point whose distances from two given straight lines are in a constant ratio is a hyperboloid of one sheet; and show that the generators through the point where the hyperboloid meets the shortest distance between the lines form a harmonic pencil with the projections of the lines on the tangent plane at that point.

12. Find the condition that the plane $lx + my + nz + p = 0$ should touch the conicoid $ax^2 + by^2 + cz^2 = 1$. If

$$u \equiv lx + my + nz + p \quad \text{and} \quad u' \equiv l'x + m'y + n'z + p',$$

show that the equation to the pair of tangent planes through the line $u = 0$, $u' = 0$ is

$$u^2(l'^2/a + m'^2/b + n'^2/c - p'^2) - 2uu'(ll'/a + mm'/b + nn'/c - pp') + u'^2(l^2/a + m^2/b + n^2/c - p^2) = 0.$$

A pair of perpendicular tangent planes to

$$x^2/a^2 + y^2/b^2 + z^2/c^2 = 1$$

pass through the fixed point $(0, 0, k)$, show that their line of intersection lies on the cone

$$x^2(b^2 + c^2 - k^2) + y^2(c^2 + a^2 - k^2) + (z - k)^2(a^2 + b^2) = 0.$$

13. Find the conditions that the plane $lx + my + nz = 0$ should cut $ax^2 + by^2 + cz^2 = 1$ in (i) a parabola, (ii) a circle.

Show that the locus of the line of intersection of two perpendicular planes which pass each through one of two given lines is a hyperboloid whose central circular sections are perpendicular to the given lines and have their diameters equal to the shortest distance between them.

THIRD PAPER—TWO HOURS.

(NOTE.—Candidates are requested not to attempt more than FIVE of the following questions.)

1. Prove that $\int_0^\infty e^{-x} \cdot x^{n-1} dx$ (n positive) is a convergent integral.

Prove fully that $B(m, n) = \frac{\Gamma(m)\Gamma(n)}{\Gamma(m+n)}$,

and show how $\Gamma(n)$ can be readily obtained for all positive values of n , after the values of $\Gamma(n)$ have been calculated from $n = \frac{1}{5}$ to $n = \frac{4}{5}$.

2. How would you determine the position and nature of the singular points on a given surface?

Find the singular point on the surface

$$x(x^2 + 3y^2 + 3z^2) = 3a(x^2 - y^2 - z^2),$$

and the locus of the tangent lines at the point. Discuss the form of the surface.

3. What is the geometrical interpretation of the differential equation

$$M \frac{dy}{dx} + N = 0,$$

where M, N are homogeneous functions of $ax + by + c, Ax + By + C$ of the same degree? Show how to find the complete primitive.

Solve the equations

$$(i) \quad 3x^2 \frac{dy}{dx} + y^4 = xy,$$

$$(ii) \quad (y^6 + 2xy)dx + (2xy^5 - 3x^2)dy = 0,$$

$$(iii) \quad y \frac{d^2y}{dx^2} + \left(\frac{dy}{dx} \right)^2 + 1 = 0.$$

4. Prove that the complete primitive of

$$2ay + a^2x^2 + 2axp + 2p^2 = 0$$

represents a family of parabolas, the envelope of which is the parabola $4y + ax^2 = 0$.

Find the complete primitive, sketch the representative curves, and examine the discriminants of the equation

$$x^3p(2y + xp) + 4a^3 = 0.$$

5. Explain how the solution of the equation

$$(D - a)^r \cdot \{ (D - \lambda)^2 - \mu^2 \}^s \cdot y = 0$$

is obtained; D denoting $\frac{d}{dx}$.

Integrate the following:

$$(i) (x+1)^3 \frac{d^3y}{dx^3} + (x+1) \frac{dy}{dx} - 2y = x^2,$$

$$(ii) (D-2)(D^2-8) \cdot y = e^{2x} + x^2.$$

6. Show that a solution of the partial differential equation

$$Pp + Qq = R$$

exists passing through any curve given by

$$F_1(x, y, z) = 0 \quad \text{and} \quad F_2(x, y, z) = 0.$$

Find the solution of

$$p(x-a) + q(y-b) = z-c$$

through the circle $x^2 + y^2 = 1, z = 0$.

Find the solution of

$$xp + (x+y)q = x+z.$$

7. Prove Cauchy's Theorem, that $\int_C f(z) \cdot dz = 0$, and apply it to prove that

$$\int_C f(z) \cdot dz = 2\pi i \cdot \phi(a),$$

if $(z-a)f(z) = \phi(z)$ and $\phi(z)$ is regular in the neighbourhood of $z=a$.

Prove that an algebraic equation of degree n has n roots.

8. By integrating $e^{iz} \cdot z^{n-1}$ round the infinite sector consisting of the first quadrant, prove that

$$\int_0^\infty \frac{\cos x}{\sin x} \cdot x^{n-1} \cdot dx = \Gamma(n) \cdot \frac{\cos n \frac{\pi}{2}}{\sin n \frac{\pi}{2}} \quad (0 < n < 1),$$

and deduce that

$$\int_0^\infty \cos x^2 \cdot dx = \frac{1}{2} \cdot \sqrt{\frac{\pi}{2}}.$$

NATURAL PHILOSOPHY.

FIRST PAPER—THREE HOURS.

(Candidates are requested to confine themselves to EIGHT of the following questions.)

1. Give the theory of the small oscillations of a compound pendulum. Show that for a given pendulum and a fixed direction of the axis relatively to the pendulum the locus of the positions of the axis of suspension for any possible period is a pair of circles drawn in the plane of oscillation.

With a compound pendulum practically consisting of a rod along which a pair of knife-edges of negligible mass could be shifted a value of g about 1400 cm./sec^2 was deduced from an accurately observed period, the same about both knife-edges, and the distance between the knife-edges. What was the cause of the error?

2. A long uniform rod is pivotted at one end and oscillates as a compound pendulum. Show how the components of stress at any point of the rod and at any phase of an oscillation may be obtained.

Prove that the breaking couple is a maximum at a distance of $\frac{1}{3}$ the length of the rod from the fixed end.

3. A bifilar suspension consists of two threads of equal length l , attached at their upper ends to two points at a distance $2a$ apart and at their lower ends to two points (of a suspended body) also on the same level and $2b$ apart. The whole arrangement when in equilibrium is symmetrical about a vertical plane perpendicular to the plane of the threads and containing the centroid of the suspended body. Find the restoring couple when the body is turned through any angle about the vertical through the centroid.

The suspended body is a thin disk of radius r and mass m with its plane vertical, and the distances $2a$, $2b$, and the length l , are each $=r$. Show that if an angular velocity ω is suddenly communicated to the disk about the vertical through its centre the disk will ultimately be raised a height $\omega^2/8g$, and that the stretching force in each cord is initially increased by $\frac{1}{8}m\omega^2r$.

4. Establish the equations for the equilibrium of a flexible cord acted on by any forces, namely

$$\frac{d}{ds} \left(T \frac{dx}{ds} \right) + \rho X = 0, \text{ etc.}$$

Deduce the equation $y = c \cosh \frac{x}{c}$ for the common catenary, and show that if a flexible cord of length l be *tightly* stretched between two points in the same horizontal line at distance d apart, c is approximately equal to $\sqrt{d^3/24(l-d)}$. Why would the method here indicated for determining c prove inaccurate in practice?

5. A particle of mass m oscillates about the lowest point O of a bowl which is rotating about the vertical through that point with constant angular velocity n . The position of the particle is referred to axes drawn through O . Of these Ox , Oy are horizontal and in the principal planes of curvature through O , and therefore revolve with the bowl: Oz is vertical. Assuming that if ρ , ρ' be the principal radii of curvature at O , the equation of the surface may be written

$$z = \frac{1}{2} \left(\frac{x^2}{\rho} + \frac{y^2}{\rho'} \right) + \text{higher terms.}$$

Prove that the kinetic energy is given by

$$T = \frac{1}{2} m \{ \dot{x}^2 + \dot{y}^2 + n^2(x^2 + y^2) - 2n(x\dot{y} - y\dot{x}) \}.$$

If the vibrations are small, find the potential energy and the equations of motion, and prove that the periods of oscillation are given by the roots of the quadratic in λ^2 ,

$$(\lambda^2 - n^2)^2 - g \left(\frac{1}{\rho} + \frac{1}{\rho'} \right) (\lambda^2 + n^2) = 0.$$

6. Write down the differential equation of the orbit of a particle moving under the action of a central force. Integrate for the case in which the force follows the Newtonian law, and determine the constants of integration in terms of the co-ordinates of the point of projection and the velocity and direction of projection.

In the case of elliptic motion under the Newtonian law of attraction, if T be the kinetic energy at any point in the orbit, prove that the integral $\int T dt$ taken over a complete period has the same value for all orbits round the same centre for which the mean distance has the same value, and find that value.

7. Find the tangential and normal components of force in a central orbit, and hence find an expression for the difference between the kinetic energy of a planet at any point and its kinetic energy in perihelion.

By consideration of the tangential and normal components force prove the theorem that if the same orbit is described by a particle in each of n different fields of force, and the velocities at a given point P be v_1, v_2, \dots, v_n in the several cases the same particle can describe the same orbit in the resultant field obtained by superimposing the n fields, and the velocity at P will be

$$(v_1^2 + v_2^2 + \dots + v_n^2)^{\frac{1}{2}}.$$

8. Write down the Cartesian equations of a particle moving under a central force following any law of distance $P = f(r)$. Show that the motion is in a plane curve, and find the two first integrals of the equations of motion.

Taking new variables X, Y, T given by the equations

$$X = \frac{x}{y}, \quad Y = \frac{1}{y}, \quad T = \int \frac{dt}{y^2},$$

transform the equations of motion given in x, y, t , and show that if T is interpreted as time and X, Y as co-ordinates, the transformed

motion is one in a field of force parallel to the axis of Y , and find the magnitude of the force.

9. A uniform lath of length $2l$ and mass σ per unit of length is supported by two trestles at its ends which are on the same level and are free, and a mass M is hung on at the middle point. Show that the droop at the middle is given by the equation

$$y = \frac{1}{6} \frac{Ml^3}{B} g + \frac{5}{24} \frac{\sigma l^4}{B} g$$

where B is the flexural rigidity of the bar.

The centre of the bar is pressed down so as to slightly increase the droop beyond the value y , and is then released. Neglecting the mass of the bar itself, find the period of the oscillations set up.

10. A thin steel wire is held bent in a plane curve by forces applied to the ends. If F be one of these forces and θ be the angle which a tangent at a cross-section P makes with the direction of F , and s be the distance of P along the wire from chosen point upon it, show that

$$B \frac{d^2\theta}{ds^2} + F \sin \theta = 0.$$

Hence find a dynamical analogue for the distribution of curvature along the wire.

11. Show that the couple required to hold in equilibrium a solid shaft of radius r and length l subjected to uniform twist θ/l is $\frac{1}{2}\pi n r^4 \theta/l$. Hence find the couple due to the outer cylindrical shell of thickness dr of the shaft, and show that the utmost couple that can be obtained from such a shaft when every part is strained to the yield point is $\frac{2}{3}$ of that required to bring the surface to the yield point.

Show that if the equilibrating couple on a twisted shaft is suddenly reversed, the strain produced will, on the supposition that Hooke's law holds, produce triple strain in the opposite direction.

12. A solid isotropic sphere of radius a and density ρ is in equilibrium under its own gravitational attraction. If w be the radial displacement at distance r from the centre, show that the equation of equilibrium is

$$(k + \frac{2}{3}n) \frac{d}{dr} \left(\frac{dw}{dr} + \frac{2w}{r} \right) - \frac{2}{3}\pi\rho\kappa r = 0$$

where k , n are the principal moduluses of the material and κ is the constant of gravitation.

Show that this equation has the primitive

$$w = Ar + \frac{B}{r^2} + Cr^3$$

and find the value of C .

SECOND PAPER—THREE HOURS.

(Candidates are requested not to attempt more than EIGHT questions.)

1. Establish the equation of continuity and the differential equations of a line of flow of a compressible fluid in steady motion.

If $f(x, y, z)=a$, $g(x, y, z)=b$ be two integrals of the equations of a line of flow, and u, v, w be the component velocities of the fluid at (x, y, z) , prove that

$$Mu = \frac{\partial(f, g)}{\partial(y, z)}, \quad Mv = \frac{\partial(f, g)}{\partial(z, x)}, \quad Mw = \frac{\partial(f, g)}{\partial(x, y)},$$

where M is a multiplier. Show that the density of the fluid may be taken as the value of M .

Prove that if dx, dy be the projections, on the axes of x, y , of an element ds of any line drawn on the surface $f(x, y, z)=a$,

$$\frac{M(vdx - udy)}{\frac{\partial f}{\partial z}},$$

in which z is replaced by its value in terms of x, y , and a , is a perfect differential.

2. What is meant by saying that $w=\phi+i\psi$ (where ϕ, ψ are real functions of x, y , and $i=\sqrt{-1}$) is a function of $x+iy$? Hence investigate the conditions necessary to ensure the defined functionality.

Explain the application of these conditions to the solution of problems of two-dimensional fluid motion, making clear the physical significance of the functions ϕ, ψ .

3. A solid is in motion through a liquid unlimited in all directions from the solid. If ϕ denote the velocity potential of the motion of the liquid at any point, the kinetic energy is given by the expression

$$-\frac{1}{2}\rho \int \phi \frac{d\phi}{dn} dS,$$

where dS is an element of the surface of the solid and the integral is taken over the surface.

A sphere of radius a is in uniform motion with velocity u through a liquid extending to infinity in all directions. Find an expression for the velocity potential, and prove that the kinetic energy is $\frac{1}{2}\pi\rho a^3 u^2$.

4. Discuss the theory of "long" waves in a uniform canal, stating clearly what assumptions you make in your investigations, and the results obtained by your analysis.

Find expressions for the potential and kinetic energies of a system of waves travelling in one direction only, and show that the energy is half potential, half kinetic.

5. Investigate the value of the energy contained per unit volume in a gaseous medium in which plane waves of length λ are advancing with velocity V , and amplitude of vibration a .

Discuss the change which occurs when the waves are reflected normally at a plane surface advancing to meet them with velocity v . Find the energy in the reflected train.

6. A violin string of length l is plucked aside at a point distant a from one end, and is then let go. Investigate its form at any subsequent time.

What features are presented by the vibrations if $a=l/n$, when n is an integer, and what is their importance in acoustical theory?

7. Define Carnot's function of temperature μ , and show that if the temperature is θ on Lord Kelvin's scale, $\mu = \frac{1}{\theta}$.

Show that on any scale $\mu = l \frac{dp}{dt}$, where l is the latent heat of dilatation.

8. Show that a sudden increase in the tension of a stretched wire will raise or lower its temperature according as Young's Modulus for the wire increases or decreases as the temperature rises.

Show also that if K , K_1 , are the thermal capacities of the wire at constant length and under constant tension respectively, l the length of the wire at absolute temperature θ under stretching force T , and α the coefficient of linear expansion

$$K_1 - K = -\frac{\alpha l T}{T} \left(\frac{dT}{dt} \right)_{l=\text{const.}}$$

9. If two bodies of equal thermal capacity at absolute temperatures θ_1 , θ_2 respectively are brought to the same temperature by a reversible process, their final temperature is $\sqrt{\theta_1 \theta_2}$.

A rod of length l coated with an opaque substance is heated so that the temperature at a distance x from an end is $a + bx$. The temperatures of the different parts of the rod are then allowed to become equal by conduction; find the energy dissipated.

10. Indicate on the pressure-temperature (p , θ) diagram the positions of the ice line, steam line, and hoar frost line. Indicate also the region in which ice sublimes. Show that the three lines have a real point Q in common.

Show also that the steam line and hoar frost line cannot have the same value of $\frac{dp}{d\theta}$ at Q , and calculate approximately the respective values of $\frac{dp}{d\theta}$ from the following data—

Specific volume of water vapour = 2.1×10^5 c.c.m. at 0° C.

Latent heat of vaporisation of water at 0° C. = 606.

11. Give any reasons that you know for the view that a body on which radiation is incident is under pressure.

Describe a reversible cyclic process to which radiation may be subjected and employ it to obtain the law that the emissive power of a black body is proportional to the fourth power of the absolute temperature.

THIRD PAPER—THREE HOURS.

1. A quantity of heat Q is imparted at a given instant to an infinite solid of conductivity k , at a point O in its interior. Show that after a time t the temperature at a distance r from O will be

$$\frac{Q}{4c\sqrt{\pi^3 g^3 t^3}} e^{-r^2/4gt},$$

where c is the specific heat per unit volume, and $g = k/c$.

Find the radius of the sphere which separates points at which the temperature is rising from those at which it is falling, and show that its rate of increase is inversely proportional to its magnitude.

2. An infinite conducting solid is bounded by a plane face, the temperature of which at time t is $V_0 \cos nt$. Show that the velocity of propagation of the wave of temperature into the interior of the solid is $\sqrt{\frac{2nk}{\pi c}}$, where k is the conductivity, and c the thermal capacity of unit volume.

At depths of 6, 12, 24 feet the annual ranges of fluctuation of temperature are 5.6°C. , 2.8°C. , 0.7°C. Find the velocity of propagation of the temperature wave into the earth.

3. A rod heated in any manner is surrounded by a medium at temperature zero.

Investigate the equation of motion of heat in the rod, and show that it can be reduced to the form

$$c \frac{du}{dt} = k \frac{d^2u}{dx^2},$$

where c is the specific heat per unit volume, and k is the conductivity.

Show that if the rod is heated by maintaining its two ends at a constant temperature V , the temperature at the middle point of the rod when a steady state has been attained will be $V \operatorname{sech} \left(l \sqrt{\frac{hp}{ka}} \right)$, where $2l$ is the length of the rod, p the perimeter and a the area of the cross-section, and h the emissivity of the surface.

4. Discuss fully the method employed by Forbes in determining the conductivity of a bar in absolute measure, and show how the relation of conductivity to temperature can be deduced from his observations.

5. A thin ring surrounded by a medium at temperature zero is heated at one point by a source of temperature V_0 . After the temperature of the ring has assumed its steady condition, the source is withdrawn. Express by means of Fourier's series the value of the temperature at any point of the ring at a time t after the suppression of the source.

6. Show that the potential in an electric field cannot have a true maximum or minimum value except at the surface of a conductor.

A hollow conductor contains a number of electrified bodies the algebraic sum of whose charges is zero. Show that the conductor is at zero potential if there are no charged bodies in the field outside it.

Hence show that the potential of a closed conductor is not affected by the displacement of charged bodies inside it.

7. Show that if a system of conductors at constant potentials undergoes a small displacement, the work done by the electric forces is equal to the gain of electric energy of the system.

Apply this result to show that the moment of the couple acting on the needle of a quadrant electrometer is proportional to

$$(A - B)(C - \frac{1}{2}A + B),$$

where A and B are the potentials of the quadrants and C is the potential of the needle.

Criticise the hypotheses on which this formula is obtained.

8. Parallel plane conducting surfaces x and y are kept at potential zero under the influence of a charge e at a point P between the planes at distances p and q from them. Show that the field between the planes can be regarded as due to charges at P and at its successive images in the two planes, the charges being alternately $+e$ and $-e$.

Thence calculate the electric density at any point of either plane.

By the method of inversion show that the above system can be transformed into two conducting spheres of radii a and b in contact, and prove that the capacity of the spheres is

$$\frac{ab}{a+b} \sum_{n=1}^{n=\infty} \frac{1}{n \{n(a+b) - b\}}.$$

9. Prove that at the common boundary of two dielectrics of specific inductive capacity $K_1, K_2, K_1 \frac{dV}{dn_1} + K_2 \frac{dV}{dn_2} = 0$, n_1, n_2 being normals to the boundary drawn into the dielectrics.

A small sphere of specific inductive capacity K and radius a is introduced into a uniform field of force of strength X . Show that the potential outside the sphere is $\frac{(K-1)Xa^3 \cos \theta}{(K+2)r^2} - Xr \cos \theta$, the centre of the sphere being the origin of coordinates.

10. Show that the energy of a system of electrified conductors can be represented by $\frac{1}{8\pi} \iiint K R^2 dx dy dz$, where R is the electric intensity and K the specific inductive capacity at any point in the dielectric.

Employ the expression given in the last question to show that the work done in introducing a small dielectric sphere of radius a into a uniform field of intensity X is

$$\frac{(K-1)a^3 X^2}{6(K+2)}.$$

11. Show that the magnetic field of two or more doublets placed at a point O is identical with the field of a single doublet at O , whose moment is the resultant of the moments of the given doublets.

Two doublets of moments M_1, M_2 are placed at A and B distant r apart, with their axes in the same plane, and making angles θ_1 and θ_2 respectively with AB .

Show that the moment of the couple exerted by B on A is

$$\frac{M_1 M_2}{r^3} (2 \sin \theta_1 \cos \theta_2 + \sin \theta_2 \cos \theta_1).$$

12. Show that the potential energy of a magnet in a magnetic field is $-\iiint (A\alpha + B\beta + C\gamma) dx dy dz$, A, B, C being components of magnetization at (x, y, z) , α, β, γ , the components of the force of the field, and the integration extending through the volume of the magnet.

Show that if a ring of soft iron is put through a cyclic process of magnetization the energy dissipated is $\frac{A}{4\pi}$, where A is the area of the cycle on the B, H diagram.

D.—GROUP OF SEMITIC LANGUAGES.

HEBREW.

FIRST PAPER—THREE HOURS.

I. 1. Translate Amos v. 6—12.

2. The force of the imperatives in v. 6*a*; the syntax of 6*b*; the connection of **הַהִפְכִּים** in v. 7, and of **עֲשֵׂה** in v. 8 (What is the government of this word?); the construction of **יּוֹם לִיכָה** in v. 8; the syntax of v. 12*a*; the tense usages of **הִנֵּהוּ** in v. 7 and **הָטָר** in v. 12. Have you any remarks to make on the accents in v. 11*a*?

3. Give a brief account of the time and circumstances of the activity of Amos. Characterize his style.

II. 1. Translate Micah iv. 6, 7 and 11—13.

2. Give the construction of **רַעַי** in v. 9, and explain the tense usage in **רִתְּהוּ** in v. 11.

3. Discuss the question raised by the mention of **בְּבֶל** in v. 10.

4. Give a brief account of the times and work of Micah.

III. 1. Translate Habakkuk i. 11 with explanatory notes; translate v. 13, and give the syntax of the second half-verse.

2. Translate ii. 8 and give the syntax of the second half-verse. Give the syntax of v. 14.

3. Translate iii. 8—13. Give the syntax of the last two words in v. 8; construe the first two words in v. 9, and **עֲרֹת** in v. 13.

IV. 1. Translate Zechariah ix. 9—17.

2. What is the syntax of **רַעַל עִיר** in v. 9; **גֹּם**, v. 11; **מִגִּיד**, v. 12; **כִּי דִרְכִּי** and **קֶשֶׁת** in v. 13; **וְהָמֹר** in v. 15; and **כִּצְאוֹן עָמֹר** in v. 16?

3. The ancient Versions render **נֹרְשֵׁי** in v. 9 'Saviour.' What objection is there to this rendering? What is the proper rendering?

4. The LXX render **וּמִשְׁלוֹ מִיָּם עַד־יָם** in v. 10 by *καὶ κατάρξει ὑδάτων ἕως θαλάσσης*. How did they read their Hebrew text? How do you account for *δέσμοι τῆς συναγωγῆς* as a rendering of **אֲסִירֵי הַתְּקוּהָה** in v. 12?

5. (a) To whom does the prophecy in vv. 9, 10 refer? Give reasons for your opinion. (b) Does the mention of Ephraim and Jerusalem, in v. 10, give any indication of the date of the prophecy? (c) Who were the **בְּנֵי יִרְדֵּן**, v. 13? What bearing has the answer to this question on the date of the prophecy?

V. 1. Translate Ecclesiastes VIII. 16—IX. 6.

2. What are the grammatical peculiarities in the book of Ecclesiastes which indicate the late date of the book?

3. State the deviations from classical Hebrew which occur in the above passage, and give the classical equivalents.

4. Review the meanings which have been assigned to the word קהלת. Which of them do you consider the most satisfactory, and why?

SECOND PAPER—THREE HOURS.

I. (Composition). Give the following in punctuated Biblical Hebrew:

“And now for the words ‘Rejoice, O young man, in thy youth,’ I will venture to substitute other words: ‘Rejoice, whether young or old, in the service of God’; rejoice in the beauty of this world, in its fair scenes, in its great interests, in the hope and promise of knowledge. Rejoice in the thought of another life to which, as we grow older, we are drawing nearer. Rejoice in the companionship and affection of others, in the home to which no place can compare, in the friends whom nothing but death can part. Rejoice in the dead, more happy than the living, not as the Preacher says because they are without sense, but because ‘they are in the hands of God and there shall no evil touch them.’ Rejoice in the work which God has given us to do here, knowing that it is His work, and the preparation for a higher, which we shall carry on far beyond what we are capable of thinking or imagining at present.”—JOWETT.

II. (Unseen passages).

1. Complete the pointing, and translate:

(a) A passage from Buxtorf's *Institutio Epistolaris Hebraica*.

(b) A poetical piece by Moses ben Habib.

2. Give a translation of:

An unpointed passage from שבט יהודה.

THIRD PAPER—THREE HOURS.

I. Targum Onkelos.

1. Translate Gen. XVIII. 1—8.

2. Parse במישרי in v. 1; לקדמותהוּ in v. 2; אשכחית in v. 3; יסבין and ראכתי in v. 4; ואיכב in v. 5; איתאי and ראחי in v. 6.

3. Give the passage in Biblical Hebrew.

4. Give an Arabic version of the passage.

II. Pirke Aboth.

Translate IV. 2—5.

III. General.

1. Explain the origin of the Targums. Give a special note on the Targum Onkelos, and specify and characterize other Targums on the Old Testament.

2. Describe briefly the literary appearance of the Talmud in its completed form, and explain the process by which it came into its final form.

3. Give brief explanatory notes on the following expressions: Seder, Massecheth, Perek, Mishnayoth, Halachoth, Rav, Rabbi, Rabban, Mar, Tanaim, Amoraim, Saboraim.

4. Transcribe from Hebrew into Arabic characters and translate: A passage from the Cairo Genizah.

ARABIC.

FIRST PAPER—THREE HOURS.

Translate:

1. Noeldeke's *Delectus Veterum Carminum Arabicorum*, p. 62, l. 4, to p. 63, l. 2; p. 110, l. 1, to p. 111, l. 3; and p. 113, l. 15, to p. 114, l. 4.

2. The *Ajurrumiyah*, the *Bab al Hal*, and the *Bab al Maf'ul ma'ahu*.

3. Hariri, *Makamat* (Beyrout edition, p. 13, l. 5, to p. 15, l. 1, and p. 43, l. 8, to p. 44, l. 9).

4. The *Majani 'l Adab*, Vol. V., p. 304, l. 12, to p. 305, l. 9.

SECOND PAPER—THREE HOURS.

1. Translate into punctuated Arabic:

When Don Sebastian, King of Portugal, had invaded the territories of Muli Moluc, Emperor of Morocco, in order to dethrone him, and set his crown upon the head of his nephew, Moluc was wearing away with a distemper which he himself knew was incurable. However, he prepared for the reception of so formidable an enemy. He was, indeed, so far spent with his sickness, that he did not expect to live out the whole day, when the last decisive battle was given: but knowing the fatal consequences that would happen to his children and people in case he should die before he put an end to that war, he commanded his principal officers, that if he died during the engagement they should conceal his death from the army, and that they should ride up to the litter in which his corpse was carried, under pretence of receiving orders from him as usual. Then finding the battle go against him, he threw himself out of his litter, rallied his army, and led them on to the charge; which afterwards ended in a complete victory on the side of the Moors. He had no sooner brought his men to the engagement, but, finding himself utterly spent, he was again replaced in his litter, where, laying his finger on his mouth, to enjoin secrecy to his officers, who stood about him, he died a few moments after in that posture.

Spectator.

2. Translate either

(a) A passage from the *Moaiyad* of 13th October, 1904, on the siege of Port-Arthur.

Or,

(b) A passage from the *Muwatta* of Malik ibn Anas.

3. Point and translate (a passage from Mas'udi).

THIRD PAPER—TWO HOURS.

(The FIRST TWO questions to be attempted, and not more than THREE of the remainder.)

1. Translate and comment on the following verses of the Koran : 19, 28 ; 19, 39 ; 21, 3 ; 12, 11.

2. Translate and scan the following verses (Noeldeke, p. 63, l. 4 ; p. 61, l. 2 ; p. 57, l. 4 ; p. 54, l. 3).

3. Mention the three parts of speech, and the three parts of the verb.

4. Give the construction of *kana*, *inna*, and *zanna*, and their 'sisters,' and of *kila* and *kilta*, with examples.

5. Explain the references in the following couplet (*Majani 'l Adab*, Vol. V., p. 285, ll. 17, 18).

6. Which are considered the three greatest of the early Arab poets, and which do you prefer ?

7. What means had the Arab poets for publishing their verses, and how were they preserved ?

8. Write a brief account of Imrulkais the Poet, of Amr ibn Hind and of Dhn Unwas.

9. Contrast the characters of Abn Bekr, Omar, and Othman.

10. Which Latin or Greek poet do you think Hariri most resembles ?

11. Give a brief account of the Sabian religion.

E.—GROUP OF ENGLISH (LANGUAGE, LITERATURE, AND BRITISH HISTORY).

FIRST PAPER—THREE HOURS.

OLD ENGLISH.

1. Translate :

(a) Ælfred kyning hāteð grētan Wærferð biscep his wordum luflice and frēondlice ; and ðe cýðan hāte ðæt mē cōm swiðe oft ón gemynd, hwelce wiotan iū wāron giond Angelcynn, ægðer ge godcundra hāda ge woruldcundra ; and hū gesælīglica tīda ðā wāron giond Angelcynn ; and hū ðā kyningas ðe ðone

ónwald hæfdon ðæs folces on ðām dagum Gode and his ærendwrecum hērsumedon; and hū hīe ægðer ge hiora sibbe ge hiora siodo ge hiora ónweald innanbordes gehioldon, and eac út hiora eðel gerýmdon; and hū him ðā spēow ægðer ge mid wige ge mid wisdōme; and eac ðā godcundan hādas hū giorne hie wæron ægðer ge ymb lāre ge ymb liornunga, ge ymb ealle ðā ðiowotdōmas ðe hie Gode dōn scoldon; and hū man utanbordes wisdōm and lāre hieder ón lond sohte, and hū wē hie nū sceoldon ute begietan, gif wē hīe habban sceoldon. Swæ clæne hīo wæs oðfeallenu ón Angelcynne ðæt swiðe fēawa wæron behionan Humbre ðe hiora ðēninga cūðen understōndan ón Englisc oððe furðum án ærendgewrit of Lædene ón Englisc āreccēan; and ic wēne ðætte noht mēnige begiōndan Humbre nāren. Swæ fēawa hiora wæron ðæt ic furðum ānne ánlepne ne mæg geðencean be sūðan Teme, ðā ðā ic tō rice fēng.

(b) For þām hēr syn on lande ungetrýwða micle for Gode and for worulde, and eac hēr syn on earde on mistlice wisan hlāfordswican manege. And ealra mæst hlāfordswice sē bið on worulde þæt man his hlāfordes sāule beswice and ful mycel hlāfordswice eac bið on worulde þæt man his hlāford of life forræde oððon of lande lifigendne drife; and ægðer is geworden innan þissan earde. Eadwērd man forrædde and syððan ācwealde, and æfter þām forbærnde and Æþelred man dræfde út of his earde. And godsibbas and godbearn tō fela man forspilde wīde gynd þās þēode, tōeacan oðran ealles tō manegan þe man unscyldige forfór ealles tō wīde. And ealles tō manege hālige stōwa wīde forwurdan þurh þæt þe man sume mēn ær þām gelōgode swā man nā ne scolde, gif man on Godes griðe mæðe witan wolde. And crīstenes folces tō fela man gesealde út of þisan earde nū ealle hwīle; and eal þæt is Gode lāð, gelyfe sē ðe wille.

(c) Cōm þā tō lande Iðmanna helm
 swiðmōd swymman, sælāce gefeah,
 mægenbyrþenne þāra þe hē him mid hæfde.
 Eodon him þā tōgēanes, Gode þancodon,
 ðryðlic þegna hēap, þēodnes gefēgon,
 þæs þe hī hyne gesundne gesēon mōston.
 ðā wæs of þām hrōran helm and byrne
 lungre ālŷsed: lagu drūsade,

wæter under wolcnum, wældrēore fāg.
Ferdon forð þonon fēpelāstum
ferhþum fægne, foldweg mæton,
cūþe stræte; cyningbalde mēnn
from þām holmlife hafelan bæron
earfoðlice heora æghwæþrum
felamōdigra: fēower scoldon
on þām wælstenge weorcum gefērian
tō þām goldsele Grendles hēafod,
op ðæt semninga tō sele cōmon
frome fyrdhwate fēowertýne
Gēata gongan; gumdryhten mid
mōdig on gemonge meodowongas træd.

- (d) For þon wāt sē þe sceal his winedryhtnes
lēofes lārcwidum lōnge forþolian,
ðonne sorg and slæp smod ætgædre
earmne ānhagan oft gebindað:
þinceð him on mōde þæt hē his monndryhten
clyppe and cysse, and on cnēo lēge
honda and hēafod, swā hē hwilum ær
in gēardagum giefstōles brēc;
ðonne onwæcneð eft winelēas guma,
gesihð him biþoran fealwe wegas,
baþian brimfluglas, brædan feþra,
hrēosan hrim and snāw hægle gemenged.
Þonne bēoð þy hefigran heortan þenne,
sāre æfter swæsne, sorg bið geniwad,
þonne māga gemynd mōd geondhweorfeð,
grēteð gliwstafum, georne geondscēawað.
Sēcga geseldan swimmað eft on weg,
flēotendra ferð nō þær fela bringeð
cūðra cwidegiedda: cearo bið geniwad
þām þe sendan sceal swiþe geneahhe
ofer waþema gebind wērigne sefan.

- (e) Ic wiht geseah wundorlice
hornum bitwēonum hūþe lādan,
lyftfæt leohtlic listum gegierwed,
hūþe tō þām hām of þām hēresiþe:
walde hyre on þære byrig būr ātimbran,
searwum āsettān, gif hit swā meahte.

Ðā cwōm wuonderlicu wiht ofer wealles hrōf,
sēo is eallum cūð eorðbūendum :

āhredde þā þā hūpe, and tō hām bedrāf
werēccan ofer willan, gewāt hyre west þonan
fæhþum fēran, forð ðnette.

Dūst stonc tō heofonum, dēaw fēol on eorþan,
niht forð gewāt : nānig siþþan
wera gewiste þære wihte sið.

What is the answer to this Riddle?

2. Explain, as clearly as you can, (*a*) breaking, (*b*) i-umlaut. Account for the formation of the following words: *gyden*, *swencan*, *gesceþþan*, *gelāstan*, *wealhstod*, *feohtan*.

3. Give a short account of Alfred's translation of Orosius.

4. Write a critical estimate of *The Battle of Maldon* as an example of Old-English war-poetry.

5. Illustrate, from any one of the three passages in Question 1, the main principles of Old-English versification.

6. Translate :

Forðæm cōm Nāthan tō cīdanne ðæm cyninge Dāuīde and licette suelce he ymb sumes ðearfan and sumes earmes monnes ryht spræce, and sōhte ðæs cyninges dōm, and wolde ðæt hē æresð hine be ððrum mēnn gedēmdē, and siððan gehierde his āgne scylde, forðæm ðæt hē eft ne meahte ðæm ilcan dōme wiðcuedan. And ēac se hāliga mōnn ongeat ægðer ge ðæs cyninges scylde ge ēac his hātheortnesse and gedyrstignesse, wolde hine ðā æresð gebindan mid his āgenre ondetnesse and forhæl him ðæt hē hine eft ðrēatian wolde. Suā se lāce hȳt his isern wið ðone mōnn ðe hē snīðan wile; wēnð, gif hē hit him iewe, ðæt hē him nylle geðafigan ðæt hē hine snīðe. Ac grāpað suiðe fægre ymbūtan ðæt ðæt hē snīðan wile, and snīð swiðe hrædlīce. Suā se witga dyde ðone cyning mid his wordum: ic wēne ðæt hē hine snide slāulecor, gif hē him ær sāde ðæt hē hine snīðan wolde; ðȳ hit wæs bētre ðæt hē grāpude mid ðæm bīspelle, ærðonðe hē cīdde, suā se lāce grāpað, and strācað, and hȳt his seax, and hwæt, ærðonðe hē stingan wille. Se lāce, ðonne hē cymð ðone untruman tō snīðanne. æresð hē scēawað ðæt cumbl, and siððan hine twēonað ymb ðæs untruman geðyld, hwæðer he geðafian mæge ðæt hine mōn

snīðe. Hyt ðonne his læceseax under his clāðum oððæt he hine wundað: wile ðæt hē hit gefrēde, ær hē hit gesēo; forðæm hē wēnð, gif hē hit ær gesēo, ðæt hē hit willē forsacan.

GREGORY: *Pastoral Care*, xxvi.

SECOND PAPER—THREE HOURS.

MIDDLE ENGLISH.

1. Translate:

(a) Ierusalem is cleped soð of sahtnesse. *and* bitocneð holie chirche þer bileffulle men inne beð sehte. þenne prest cristes þroweinge minegeð. *and* of þe calice understondeð tocne of sehtnesse. þat is messe cos. *and* þe folc sent. *and* þermide bitocneð þat ure drihten is þureh þe holie loc wið bileffulle men maked sehte. *and* þerfore chirche haueð þe tocninge of bethphage þenne þe procession ut goð of ierusalem. *and* eft þenne it in cumeð. Nime we þenne geme gif ure procession bi maked after ure helendes procession. On his procession ferde sume biforen him *and* makede his weie toward ierusalem. *and* sume briggeden þe asse mid here cloðes. *and* sume mid boges þe hie breken of þe trewes. Ðo þe þe weie makeden biforen him. bien folkes lorþeawes. bisshopes *and* prestes. þe mid here wise lore rideð. *and* makeð godes weie in to mannes heorte. Ðo þe briggeden þe asse mid here cloðes. ben þo þe wisseð þe folc mid faire forbisne of here weldede. Ðo þe briggeden þe asse mid þe brokene boges. ben þo þe leren þe folc to understonden god noht mid weldede. ac mid wise speche.

(b) Lauerd godd al mihti. mi murhðe ant mi mede mi sy ant mi selhðe þu isist hu ich am bistaðet ant bistonden festne mi bileaue steor me ant streng me. for al mi strençðe is uppon þe. mi feder. & mi moder for ich nulle forsaken þe: habbeð forsaken me & al mi nest-falde cun me heaneð þet schulden mine freond beon: beoð me mest feondes ant mine hinen me beoð mest heanen ah habbich þin anes help ich am wil cweme ne leaf þu me neuer liuiende lauerd as þu wistest daniel bimong þe wode leuns ant te þreo children ananie zacharie misael inempnet. biwistest unweommet from þe ferliche fur of þe furneise swa þu wite ant witen me to witen me from sunne. lauerd þurh þis lease lif: lead me to

lestinde to þe hauene of heale as þu leddest israeles folc þurh
 þe reade sea buten schip druifot ant hare fan senchtest þat
 ham efter sohten afal þu mine famen ant to-drif drihtin þen
 deouel þat me derueð. for ne mei na mon wið-uten þi
 strence stonden him aȝeines lef me þat ich mote iseon him
 ȝet schent: þat weneð me to schrenchen ant schunchen of
 þe weie: þat leadeð to eche lif. wite me from his lað ant
 wið his cresti crokes. wite me wið mine unwines þat tu beo
 euer iheret ante iheiet in heouene ant in eorðe beo þu áá
 iblescet as þu were ant art. ant euer schalt beon in eche
 blisse. amen.

- (c) . . . þu atwitest me mine mete,
 And seist þat ich fule wiȝtes ete:
 Ac wat etestu, þat þu ne liȝe,
 Bute attercoppe and fule vlȝe?
 And wormes, ȝif þu miȝt finde
 Among þe volde of harde rinde?
 Ȝet ich can do wel gode wike,
 Vor ich can loki manne wike;
 And mine wike beoþ wel gode,
 Vor ich helpe to manne vode;
 Ich can nimen mus at berne,
 And ek at chirche in þe derne;
 Vor me is leof to Cristes huse,
 To clansi hit wiþ fule muse;
 Ne schal þar nevre come to
 Ful wiȝt, ȝif ich hit mai i-vo.
 And ȝif me lust on mi skentinge
 To wernen oþer w[u]nienge,
 Ich habbe at wude treon wel grete,
 Mit þicke boȝe noþing blete,
 Mid iui grene al bi-growe,
 Þat evre stont i-liche i-blowe,
 And his heou never ne vor-leost,
 Wan hit sniuþ ne wan hit freost;
 Þar-in ich habbe god i-hold,
 Awintre warm, asumere cold.

- (d) Leuedi, wiþ al my miht
 My loue is on þe liht,
 To menske when y may;

þou rew & red me ryht,
 To deþe þou hauest me diht,
 Y deȝe longe er my day;
 Þou leue vpon mi lay.
 Treuþe ichaue þe plyht,
 To don þat ich haue hyht,
 Whil mi lif leste may.

Lylie-whyht hue is,
 Hire rode so rose on rys,
 Þat reueþ me mi rest.
 Wymmon war & wys,
 Of prude hue bereþ þe pris,
 Burde on of þe best;
 Þis wommon woneþ by west,
 Brihtest vnder bys:
 Heuene y tolde al his
 Þat o nyht were hire gest.

- (e) Honger eet þis in haste · and asked aftur more.
 Þenne þis folk for fere · fetten him monye
 Poretēs, and Peosen · for þei him plese wolden;
 From þat tyme þat þulke weore eten · take he schulde
 his leue
 Til hit to heruest hiȝede · þat newe corn com to
 chepynge.
 Þenne was þat folk fayn · and fedde hunger ȝeorne
 With good Ale, and glotonye · and gart him to slepe.
 And þo nolde þe wastor worche · but wandren aboute.
 Ne no Beggere eten Bred · þat Benes Inne coome,
 Bote Coket and Cler-Matin · an of clene whete;
 Ne non halfpeny Ale · In none wyse drynke,
 Bote of þe Beste and þe Brouneste · þat Brewesters
 sullen.
 Laborers þat haue no lond · to liuen on Bote heore
 honden,
 Deyne not to dyne a day · niht-olde wortes.
 Mai no peny-Ale hem paye · ne no pece of Bacun,
 Bote hit weore Fresch Flesch · or elles Fisch I-Friȝet,
 Boþe chaud and pluschaud · for chele of heore Mawe.

- (f) Also, of þe forseyde Saxon tonge þat ys deled a þre,

and ys abyde scarslych wiþ feaw vplondysch men, & ys gret wondur; for men of þe est wiþ men of þe west, as hyt were vndur þe same party of heuene, acordeþ more in sounyng of speche þan men of þe norþ wiþ men of þe souþ; þerfore hyt ys þat Mercij, þat buþ men of myddel Engeland, as hyt were parteners of þe endes, vndurstondeþ betre þe syde longages, Norþeron & Souþeron, þan Norþeron & Souþeron vndurstondeþ eyþer oþer.

Al þe longage of þe Norþhumbres, & specialych at 3ork, ys so scharp, slytting & frotyng, & vnschape, þat we Souþeron men may þat longage vneþe vndurstonde. Y trowe þat þat ys bycause þat a buþ nyȝ to strange men & aliens þat spekeþ strangelych, and also by cause þat þe kynges of Engeland woneþ alwey fer fram þat contray: For a buþ more yturnd to þe souþ contray; & ȝef a goþ to þe norþ contray, a goþ wiþ gret help & strengthe. Þe cause why a buþ more in þe souþ contray þan in þe norþ may be, betre cornlond, more people, more noble cytes, & more profytable hauenes.

2. Comment upon, and illustrate as fully as you can, the differences of dialect referred to in the last passage given above.

3. Write a brief account of the following works, with notes on the dialect in which each was written: *The Ormulum*, *Handlyng Synne*, *William and the Werewolf*.

4. Trace, and illustrate, the growth of the French element in English from the Norman Conquest to Chaucer.

THIRD PAPER—THREE HOURS.

GENERAL ENGLISH LITERATURE.

1. Write critical notes on each of the following: *The Book of the Duchess*, *The House of Fame*, *Troilus and Criseyde*.

2. What do you know of the literary critics of the Elizabethan age, and of the chief topics which they discussed?

3. Illustrate and discuss the characteristics of (a) the "metaphysical" poets, (b) Elizabethan and Jacobean prose.

4. Either (a) write a critical estimate of Milton as a prose-writer, or, (b) compare the style of *Paradise Lost* with that of *Paradise Regained* and *Samson Agonistes*.

5. Write notes on (a) the influence of the town upon the poetry of the age of Anne, (b) seventeenth-century political satire.

6. Compare Addison, Swift and Fielding as social satirists.
7. Distinguish between, and give some historical account of, the various phases of the Romantic revival during the latter half of the eighteenth century.
8. Trace the rise and progress of the political theory which supported the French Revolution. How is it criticised by Burke?
9. Sketch the poetical theory of Wordsworth. In what does the real worth of his poetry consist?
10. Write a short critical estimate of Matthew Arnold's poetry. To what extent was he under the influence of Wordsworth?

FOURTH PAPER—THREE HOURS.

DRYDEN.

1. Can we regard Dryden as on the whole the best representative of the intellectual features of his age?
2. Give the substance of Dryden's remarks on (a) the poetry of Spenser and of Milton, (b) the beginnings of satirical poetry among the Romans, (c) the characteristics of Horace and Juvenal as satirists.
3. Exhibit your acquaintance with his "vehement defences of dramatic rhyme." What caused his change of view on this subject?
4. Can you recall from his poetry any lines or passages which strike you as poetically inspired? Quote also passages in which his taste or judgment conspicuously fail.
5. Compare and contrast him as a satirist with Pope.
6. Which is in your judgment the best of his plays? Mention their good qualities and summarise their chief defects.
7. Estimate his services to English literary criticism. Is he more or less trustworthy than Dr. Johnson?
8. Write a careful estimate of Dryden as a prose-writer.
9. Discuss the following remarks: (a) "No man could imitate the style of Dryden," (b) "Absalom and Achitophel comprises all the excellences of which the subject is capable," (c) "His translations alone would give him a conspicuous place in English Literature."

FIFTH PAPER—THREE HOURS.

SHAKESPEARE.

I.

1. Give some account of the theatres and theatrical companies in Shakespeare's day.
2. Discuss Shakespeare's use of prose. For what purposes is it employed in *Julius Caesar*, *Macbeth* and *The Merchant of Venice* respectively?

3. Write notes on *three* of the following, (a) The sources of *King Lear*, (b) The connection of the *Tempest* with *Die Schöne Sidea*, (c) The divergences from history in *Richard II.*, (d) The use of French in *Henry V.*, (e) The text of *Hamlet*.
4. Give examples of anachronisms and other instances of carelessness in Shakespeare. How are they to be justified?
5. Discuss the statement that Shakespeare was, in *As You Like It*, "playing with the pastoral convention" of his time.
6. Illustrate Shakespeare's use of "tragic irony."
7. Discuss fully the value of the various verse-tests for determining the order of the plays.
8. What points of resemblance, in general style and sentiment, do you find in *Cymbeline*, *The Winter's Tale*, and *The Tempest*?
9. Trace briefly the growth of the appreciation of Shakespeare in his own country.

SIXTH PAPER—THREE HOURS.

SHAKESPEARE.

II.

1. What aspects of nature does Shakespeare describe most often and with most sympathy?
2. What types of melancholy are exhibited in Shakespeare's plays?
3. Discuss *three* of the following statements: (a) "The Sonnets are autobiographical," (b) "There is a certain coldness in Shakespeare's treatment of Helena and Isabella," (c) "The characters in the latest plays are elemental, ideal, symbolical," (d) "*Lear* abounds in references to the lower animals," (e) "Malvolio is not essentially ridiculous."
4. In what respects does *Romeo and Juliet* differ from the other tragedies of Shakespeare?
5. Discuss *three* of the following characters: Hotspur, Pistol, Enobarbus, Menenius, Gonzalo, Leontes.
6. Illustrate how Shakespeare contrives in *Macbeth* to heighten our sense of weird horror by suiting throughout the "atmosphere" of the play to its subject.
7. Describe the scene in the Forum after the murder of Julius Cæsar, bringing out as clearly as you can Antony's cleverness in playing upon the feelings of the people.
8. Write a full note on the characterisation of children in Shakespeare's plays.
9. Characterise briefly the comedy of "humours." To what extent are any of its features represented in Shakespeare's plays?

SEVENTH PAPER—THREE HOURS.

SWIFT.

1. Sketch the political situation in England under the Harley Administration, and give some account of the part played in its history by Swift.

2. Discuss the following: (a) "Not the greatest satirist of his own age merely, but incomparably the greatest who ever lived," (b) "Swift was a fierce kind of philanthropist."

3. Show your acquaintance with the circumstances which produced the *Drapier's Letters*. Summarise briefly Swift's argument.

4. Write an appreciation of his style.

5. Write, with illustrations, a full note upon the irony of Swift. Can you compare his use of irony with that of any other English writer? What are the advantages and disadvantages of the ironical method in controversy?

6. What, in your opinion, was Swift's real political and religious creed?

7. Sketch the plan of *The Tale of a Tub*, and write a brief estimate of the author's genius.

8. What does Gulliver mean? It is clearly a satire,—but who and what are its objects?

9. Write notes on four of the following: (a) Swift's *Verses on his own Death*, (b) *Directions to Servants*, (c) *A Vindication of Isaac Bickerstaff, Esq., against the Objections of Mr. Partridge*, (d) *An Essay on Modern Education*, (e) *The Journal to Stella*, (f) *The Art of Political Lying*.

EIGHTH PAPER—THREE HOURS.

BYRON.

1. Estimate Byron's debt to his predecessors and contemporaries among English poets.

2. Give some account of his personal relations with his contemporaries and with his age.

3. How far is it just to regard Byron as a rhetorician rather than as a poet?

4. Sketch the plan of *Childe Harold* and quote any passages illustrative of the author's strength and of his weakness as a literary artist.

5. Compare and contrast Byron as a poet of revolution with Shelley and with Keats. Account for his popularity on the Continent.

6. Outline the plot of one of his dramas, and estimate his powers as a dramatist.

7. Byron's poetry drove Scott out of the poetic field. Does it possess, in your opinion, greater or less enduring quality than the poetry of Scott?

8. Discuss *two* of the following: (a) "The moment he reflects he is a child," (b) "The day will come when Democracy will remember all that it owes to Byron," (c) "A personality in eminence such as has never been yet, and is not likely to come again."

9. Write notes on (a) The Pessimism of Byron.

(b) Byron as a poet of Nature.

10. Estimate his powers as a satirist, illustrating your remarks from his *English Bards* and *Don Juan*.

NINTH PAPER—THREE HOURS.

LAMB.

1. Illustrate from Lamb's Essays (a) the chief incidents of his youth, (b) his personal temperament and idiosyncrasies.

2. Give a brief description of *Rosamund Gray*, and discuss its relation to the sentimental novel of the eighteenth century.

3. Illustrate Lamb's indebtedness to the prose-writers of the sixteenth and seventeenth centuries.

4. Estimate the importance of Lamb's *Specimens of English Dramatic Poets* as a contribution to dramatic criticism and the revived study of the Elizabethan drama.

5. Compare Lamb with Coleridge and Hazlitt as a critic of Shakespeare.

6. "A feature of Lamb's method (in his Essays) is his use of quotations." Discuss and illustrate.

7. Give the substance of what Lamb says about Hamlet, Richard III., and Lear, in discussing the suitability of Shakespeare's tragedies for the stage.

8. Give a brief summary of any *two* of the following essays: *Imperfect Sympathies*, *On some of the Old Actors*, *The Old and the New School-master*, *The Genteel Style in Writing*, *On the Artificial Comedy of the Last Century*.

9. Give some account of Lamb's relations with, and opinions of, Coleridge, Southey, and Wordsworth.

10. Write a brief appreciation of Lamb as a humourist, or as a poet.

TENTH PAPER—TWO HOURS.

BRITISH HISTORY.

I.

1. How far do you think Henry IV. represented the permanent tendencies of English life?

2. "Few are the partisans of departed tyranny . . . nor in the court of Henry VIII. was there to be found a single advocate for the favourites of Richard II." (*Burke*). Discuss this.

3. Write a sketch of the character of Henry VIII.

4. Considering the course of English history, what reasons would you give that the rebellions of the Tudor period were not worse than they were?

5. Is the reign of Mary Tudor properly described as a reaction?

6. Explain for your period the importance of the Netherlands.

7. Consider the changes which the accession in 1558 of another prince like Henry VIII. might have made in English affairs.

8. Suggest what influences affected the state of general morals throughout your period.

ELEVENTH PAPER—TWO HOURS.

BRITISH HISTORY.

II.

1. What could you argue from *Langland* of the strength of the Mediæval system in England?

2. If More's *Utopia* were your sole literary evidence, how would you describe the European Renaissance?

3. How far does Latimer justify the ecclesiastical policy of Henry VIII.?

4. "Laws do not take their constraining force from the quality of such as devise them" (*Hooker*). Discuss the bearing of this on Hooker's argument.

5. Suggest the lines of a criticism upon Hooker by either Latimer or Sir Thomas More.

6. Do you find any great English author akin to Hooker? Explain your view.

F.—GROUP OF MODERN LANGUAGES.

FRENCH LANGUAGE AND LITERATURE.

FIRST PAPER—THREE HOURS.

I. Traduire en Anglais :

Ce que c'est que la mort.

Ne dites pas : mourir ; dites : naitre. Croyez.

On voit ce que je vois et ce que vous voyez ;

On est l'homme mauvais que je suis, que vous êtes ;

On se rue aux plaisirs, aux tourbillons, aux fêtes ;

On tâche d'oublier le bas, la fin, l'écueil,

La sombre égalité du mal et du cercueil ;

Quoique le plus petit vaille le plus prospère,

Car tous les hommes sont les fils du même père ;

Ils sont la même larme et sortent du même œil.

On vit, usant ses jours à se remplir d'orgueil.

On marche, on court, on rêve, on souffre, on penche, on tombe,

On monte. Quelle est donc cette aube ? C'est la tombe.
 Où suis-je ? Dans la mort. Viens ! Un vent inconnu
 Vous jette au seuil des cieux. On tremble ; on se voit nu,
 Impur, hideux, noué de mille nœuds funèbres,
 De ses torts, de ses maux honteux, de ses ténèbres ;
 Et soudain on entend quelqu'un dans l'infini
 Qui chante, et par quelqu'un on sent qu'on est béni,
 Sans voir la main d'où tombe à notre âme méchante
 L'amour, et sans savoir quelle est la voix qui chante.
 On arrive homme, deuil, glaçon, neige, on se sent
 Fondre et vivre ; et d'extase et d'azur s'emplissant,
 Tout notre être frémit de la défaite étrange
 Du monstre qui devient dans la lumière un ange.

VICTOR HUGO.

II. Translate into French ;

(a)

MILTON'S STYLE.

Milton has always the sure, strong touch of the master. His power both of diction and rhythm is unsurpassable, and it is characterized by being always present—not depending on an access of emotion, not intermittent, but, like the grace of Raphael, working in its possessor as a constant gift of nature. Milton's style, moreover, has the same propriety and soundness in presenting plain matters, as in the comparatively smooth task for a poet of presenting grand ones. His rhythm is as admirable when, as in the line—"And Tiresias and Phineus, Prophets old,"—it is unusual, as in such lines as—"With dreadful faces thronged and fiery arms"—where it is simplest. And what high praise this is, we may best appreciate in considering the ever-recurring failure, both in rhythm and in diction, which we find in the so-called Miltonic blank verse of Thomson, Cowper, Wordsworth. What leagues of lumbering movement ! What desperate endeavours as in Wordsworth's

"And at the Hoop alighted, famous inn,"

to render a platitude endurable by making it pompous ! Shakespere himself, divine as are his gifts, has not, of the marks of the master, this one : perfect sureness of hand in his style. Alone of English poets, alone in English art, Milton has it ; he is our great artist in style, our first-rate master in the grand style. He is as truly a master in this style, as the great Greeks are, or Virgil, or Dante. The number of such masters is so limited that a man acquires a world rank in poetry and art, instead of a mere local rank, by being counted among them.

(b)

Loveliest of trees, the cherry now
 Is hung with bloom along the bough,
 And stands about the woodland side
 Wearing white for Eastertide.

Now, of my threescore years and ten,
 Twenty will not come again,
 And take from seventy springs a score,
 It only leaves me fifty more.

And since to look at things in bloom
 Fifty springs are little room,
 About the woodlands I will go
 To see the cherry hung with snow.

HOUSMAN.

SECOND PAPER—THREE HOURS.

1. (a) Traduire en français moderne :

Rodlant ferit en une piedre bise :
 Plus en abat que jo ne vos sai dire ;
 L'espede croist, ne foisset ne ne briset,
 Contre lo ciel a mont est ressortide.
 Quant veit li coms que ne la fraindrat mie, 5
 Molt dolcement la plainst a sei medisme :
 " E Durandal, com iès bele e saintisme !
 En l'orie pont assez i at reliques,
 Un dent saint Piedre e del sanc saint Basile,
 E des chevels mon seignor saint Denisie, 10
 Del vestement i at sainte Marie :
 Il nen est dreit que paien te baillissent ;
 De crestiens devez être servide.
 Molt larges terres de vos avrai conquises,
 Que Charles tient qui la barbe at floride : 15
 Li emperedre en est e ber e riches.
 Ne vos ait om qui facet codardie !
 Dieus, ne laissez que France en seit honide !"

(b) Scandez les vers 3, 4, 6, 7, 9, 12, 13, 16 et faire les observations que vous jugerez à propos à ce sujet.

(c) Expliquez la situation dans laquelle se trouve ici Roland, et parler de son caractère en prenant ce passage pour base de vos observations.

II. Commentaire philologique du Sonnet suivant :

Marcher d'un grave pas et d'un grave sourci,
 Et d'un grave soubreiz à chacun faire feste,
 Balancer tous ses mots, respondre de la teste,
 Avec un Messer non, ou bien un Messer si :

Entremesler souvent un petit, *É così*
 Et d'un *Son Servitor* contrefaire l'honneste :
 Et, comme si l'on eust sa part en la conqueste,
 Discourir sur Florence, et sur Naples aussi :

Seigneuriser chacun d'un baisement de main,
 Et suivant la façon du courtisan Romain,
 Cacher sa pauvreté d'une brave apparence :

Voila de ceste Court la plus grande vertu,
 Dont souvent, mal monté, mal sain et mal vestu,
 Sans barbe et sans argent on s'en retourne en France.

DU BELLAY.

THIRD PAPER—THREE HOURS.

I. Dissertation française.

Traiter aussi complètement que possible l'un des sujets suivants :

(a) L'histoire et la poésie ont-elles eu des rapports au XIX^e siècle ? Si oui, les caractériser nettement en indiquant l'influence de la poésie sur l'histoire et de l'histoire sur la poésie.

(b) "Toute composition historique est un travail d'art autant que d'érudition," a dit un historien. Discuter cette pensée et dire si les historiens français du XIX^e siècle ont ainsi conçu l'histoire.

(c) Etudier et préciser les rapports généraux qui existent entre la vie, le caractère, et l'œuvre des principaux historiens français du XIX^e siècle.

(d) Etudier et comparer le sentiment de la nature chez Michelet et chez Lamartine.

(e) Etudier et comparer le rôle de l'inspiration et de l'imagination chez Victor Hugo et chez les grands historiens français.

II. Indiquer les grandes lignes d'une composition française sur l'un des sujets suivants :

(a) Les étapes de la pensée de Pascal.

(b) Dans quelle mesure la vie et l'œuvre de Pascal sont-elles en harmonie ?

(c) Les Sonnetistes français et anglais du XVI^e siècle : que doivent ceux-ci à ceux-là ?

(d) Caractériser la langue poétique française du XVI^e siècle.

(e) Exposer les principales idées contenues dans la "Défense et Illustration de la Langue française."

(f) Joinville, historien : ses mérites et ses faiblesses.

(g) Du style de Froissart : d'où vient son charme ?

GERMAN LANGUAGE AND LITERATURE.

FIRST PAPER—THREE HOURS.

I.

1. Translate the following passages into modern German :

(a) Die hêrren wâren milte, von ârde hôhe erborn,
mit kraft unmâzen küene, die rêcken ûz erkorn.
dâ zen Bûrgonden sô wâs ir lant genant.
si frumden starkiu wunder sît in Êtzêlen lant.

In disen hôhen êren trôumte Kriemhilt,
wi si zûge éinen valken stârc, scœn und wilt,
den ir zwêne aren erkrummen, daz si daz muoste sehen.
ir enkunde in dirre werlde leider nimmér gescehen.

Von wîsen und von tumben man hôrte manegen stôz,
daz der scefte brechen gein den lûften dôz;
trunzûne sach man vliegen für den palas dan
von maneges recken hende; daz wârt mit vlizé getân.

Sus wond er bi den hêrren, daz ist âlwâr,
 in Gûnthêres lande volleclich ein iâr,
 daz er die minneclichen die zîte nien gesach,
 dâvon im sît vil liebe unde ôuch vil lédé gescach.

Duo flouc daz schiltgespenge von Sivrides hant.
 den sic gedâht erwerben der helt von Niderlant
 an den kûenen Sahsen, der man wunder sach.
 hei, waz dâ liechter ringe der kûene Dâncwârt zebrach !

Dô hêt der hêrre Liudegêr ûf eime schilde erkant
 gemâlet eine krône vor Sivrides hant.
 wol wesser, daz ez wære der kréftige man.
 der helt zuo sinen friwenden lûte rûofén began.

Write *short historical notes* on the above passages, and explain the meaning of the following words: *Degen, Gunther, Gernot, Giselher, juncvrouw, vrouwe, truhsæze, herre, geriute, gebûr.*

(b) swie böese er ist der mich gesiht,
 des böeser muoz ich dannoch sîn :
 sîn unwert tuot er mit schîn.
 er wirfet diu ougen abe mir.
 nû schinet êrste an dir
 dîn triuwe die dû hâst,
 daz dû mich siechen bi dir lâst
 und von mir niht enflühest.
 swie dû mich niht enschiuhest,
 swie ich niemen liep sî danne dir,
 swie vil dîns heiles stê an mir,
 du vertrüegest doch wol mînen tôt.
 nû wes unwert und wes nôt
 wart ie zer werlte merre ?

im gêt sîn pfluoc harte wol,
 sîn hof ist alles râtes vol,
 da enstirbet ros noch daz rint,
 da enmüent diu weinenden kint,
 da enist ze heiz noch ze kalt,
 da enwirt der jâre niemen alt,
 der alte wirt junger,
 da enist durst noch hunger,
 da enist deheiner slahte leit,
 da ist ganziu fröude ân arbeit
 ze dem wil ich mich ziehen
 und solhen bû fliehen
 den daz fiur unde der hagel sleht
 und der wâc abe tweht,
 mit dem man ringet unde ie ranc.

2. Translate :

Dô der truhsæze getete
 sîner vrôuwen rede nâch ir bette,

und dô si ouch hórten sagen,
 ez kœme in vierzehen tagen
 der künec Artûs dar mit her :
 vund er den brunnen âne wer,
 sô wære er benamen verlorn :
 wan er hete der vart gesworn ;
 und als in rehte wart geseit
 des rîters geburt ûnd sîn vrûmekeit
 zuo der schœne di si sâhen,
 von rehte si des jâhen,
 ez wære vrume und êre.
 waz sol der rede mêre ?
 wan ez was michel vuoge.

II.

(Answer SEVEN of the following questions.)

1. What do you know about the Christian poetry of the ninth century ?
2. What circumstances favoured the outburst of poetic talent in the 12th century ?
3. Enumerate the great works of the first classical period, which were due to the influence of France. Give the contents of one of them.
4. Does any fundamental idea run through the *Nibelungenlied* ?
5. Give some account of the *Minnesinger*.
6. Who formed the members of a *Singschule* ? What were the functions of such Schools ?
7. The German drama responded quickly to the stimulus of the Reformation. Discuss this statement.
8. The *Büchlein von der deutschen Poeterei* introduces a new period in the history of German poetry. Estimate the permanent value of this work.
9. What events prepared the way for the great revival in the middle of the eighteenth century ?

SECOND PAPER—THREE HOURS.

(FOUR questions to be answered ; ONE, at least, from each section, and not more than TWO from any one section.)

A.

1. Eine kurze Charakteristik Brunhilds.
2. Geben Sie ein Bild von Johann Fischarts Leben und Werken.
3. Schildern Sie die Dichtung und Wirksamkeit Gellerts.

B.

4. Was wissen Sie über die Dichter des Sturmes und Dranges ?
5. Skizzieren Sie Heinrich von Kleists Leben und Dichtung.
6. Schildern Sie die Dichter der älteren romantischen Schule.

C.

7. Worin bestehen die Verdienste Lessings?

8. Geben Sie ein Bild von der Freundschaft Schillers und Goethes und ihrer Wirkung auf beide Dichter.

THIRD PAPER—THREE HOURS.

I.

1. Translate into English, and comment *briefly* upon the following passages :

- (a) Ach ! was in tiefer Brust uns da entsprungen,
Was sich die Lippe schüchtern vorgelallt,
Misrathen jetzt und jetzt vielleicht gelungen,
Verschlingt des wilden Augenblicks Gewalt.
Oft wenn es erst durch Jahre durchgedrungen,
Erscheint es in vollendeter Gestalt.
Was glänzt, ist für den Augenblick geboren ;
Das Echte bleibt der Nachwelt unverloren.
- (b) Die Sonne tönt nach alter Weise
In Brudersphären Wettgesang,
Und ihre vorgeschriebne Reise
Vollendet sie mit Donnergang.
Ihr Anblick gibt den Engeln Stärke,
Wenn keiner sie ergründen mag ;
Die unbegreiflich hohen Werke
Sind herrlich wie am ersten Tag.
- (c) Ich, Ebenbild der Gottheit das sich schon
Ganz nah gedünkt dem Spiegel ew'ger Wahrheit,
Sein selbst genosz in Himmelsglanz und Klarheit
Und abgestreift den Erdensohn ;
Ich, mehr als Cherub, dessen freie Kraft
Schon durch die Adern der Natur zu fliesen
Und schaffend Götterleben zu genieszen
Sich ahnungsvoll vermasz, wie musz ich's büszen !
Ein Donnerwort hat mich hinweggerafft.
- (d) Erst zu begegnen dem Thiere,
Brauch' ich den Spruch der Viere :
Salamander soll glühen,
Undene sich winden,
Sylphe verschwinden,
Kobold sich mühen !

2. Give a short account of the Faust legend.

3. Explain the following words and expressions : *schon vor Vieren, von Nostradamus eigner Hand, der Drudenfuss, Fliegengott, in Gesellschaft von Adepten, mein Leid ertönt der unbekannten Menge.*

4. Translate :

(a)

Zw disch man fürstlichen hoffirt,
 Mit saitenspiel wol concordirt,
 Harpfen und claffe-zimel.
 Ain palsam-ruech
 Den sal durch-kruech ;
 Mich dawcht, ich wer im himel.

Als man vom künigs-mal aufstou,
 Fingen ein sumer-rayen an
 Mit hoffelichem prangen,
 Die frawen zart
 Englischer art
 Ir rayen-lieder sangen.

(b)

Jetzt hant dar jnn wir gantz nüt me ;
 Es möcht eym hertten steyn thun we,
 Was wir alleyn verloren hant
 In kleyn Asyen und kriecken landt,
 Das man die grosz Türcky yetz nennt,
 Das ist dem glauben abgetrennt :
 Do sint die syben kirchen gsin,
 Do hat Johannes gschriben hyn
 Do ist eyn so gut landt verlorn,
 Das es all welt möht han verschworn.

5. Translate into German :

Of this trio each is complete in all the three dimensions. Each feels deeply, each knows and sees clearly, and each has a stout grasp of reality. This completeness is what gives them their universal fame, and makes them interesting in all times and places. Each, however, is less complete in some directions than in others. Dante, though no fanatic, yet is less rational than so great a man should have been. Shakespeare has one deficiency, he wants academic knowledge. Goethe, too, has his defects, but this is rather the place for dwelling on his peculiar merits. In respect of influence upon the world, he has for the present the advantage of being the latest, and therefore the least obsolete and exhausted, of the three. But he is also essentially much more of a teacher than his two predecessors. Alone among them he combines with a sovereign imagination a great range of knowledge and a capacity and habit of taking practical views.

II.

HISTORICAL GRAMMAR.

(Answer SIX of the following questions.)

1. What dialects are grouped under West Germanic? From which dialect did modern German spring?

2. Point out the general effects of the process called the second sound-shifting.

3. At what period do we meet with the first connected German writings? What tribes have left the richest literature behind them?

4. Explain the meaning of the term *Ablaut-series*. Give examples.
5. Give the chief parts of *hāhen, gān, slāhen, komen, kiesen, dihen, tuon*.
6. Sketch the origin and history of the New High German *Schriftsprache*.
7. The changes called *Umlaut* and *Brechung* contributed largely towards altering the German vowel-system. Discuss this statement.
8. What do the Middle High German vowels *uo, iie, î, û, iu* become in Modern High German?

G.—GROUP OF ECONOMIC SCIENCE.

POLITICAL ECONOMY.

FIRST PAPER—THREE HOURS.

(*Not more than SIX questions to be attempted.*)

1. "The classical economists belonged to a pre-Darwinian age." Examine this statement. What light has the fiscal controversy thrown on the prevailing *methods* of studying economic problems?
2. "Malthus was right in his premises but not justified in his gloomy forebodings." Expand.
3. Illustrate from the fiscal controversy some of the difficulties in the interpretation of statistics.
4. What determines the rate of interest? Is there any analogy between rent and interest?
5. Trace the economic consequences (a) of a legal minimum wage, (b) of a legal eight hours' day, in all industries.
6. "The contention of some modern economists, that wages are always paid out of the produce of the labour rewarded by them, does not seem justifiable, any more than the contention that the price of the product is the real wages fund." (*Dr. James Bonar.*) Discuss.
7. Are Trade Unionists inconsistent in opposing Tariff Reform?
8. Is it possible for a nation to "live on its capital"? If so, what tests should you apply to determine whether it was doing so or not?

SECOND PAPER—THREE HOURS.

(*Not more than SIX questions to be attempted.*)

1. State fully the different explanations that have been given of the general fall of wholesale prices since 1874. How far do you consider them adequate, and for what reasons?
2. What is meant by the "Draft in London"? Discuss the possible effects of tariff changes on London's financial position.
3. What do you think of the proposal that the profits from the disinterested public management of the drink trade should go to the reduction of the National Debt?

4. Criticising the proposition that a tax on land values at 20s. on the £ would be confiscation, the paper "Land Values" (April, 1905) said: "The author does not pause to consider the fact that all taxation is confiscation." Examine the statement.

5. Explain and defend the principle of the British Death Duties, showing what part they play in the general scheme of taxation. Give and defend your opinion whether these duties should be extended or not.

6. Discuss, with illustrations, the chief financial and economic considerations which enter into the question of defraying the expenses of a war.

7. Consider the proposition that land and buildings are the only proper basis for local taxation.

8. Classify the existing examples of municipal trading; indicate what features, in your opinion, render an industry suitable for public ownership; and examine, in some detail, the case of municipal house-building.

THIRD PAPER—TWO HOURS.

(*Not more than THREE questions to be attempted.*)

1. "'Nature,' as we know, is a word contrived in order to introduce as many equivocations as possible into all the theories . . . into which it enters." Illustrate.

2. Write a short history of the controversies in England concerning the nature of political obligation.

3. What are the best criteria of economic prosperity?

4. Discuss the principles on which alien immigration should be allowed or controlled.

5. What is meant by the economic interpretation of history?

6. "The most recent economic literature is based upon a recognition of the fact that a large measure of positive activity of government in the regulation of economic relations is necessary to secure true liberty." Discuss and illustrate.

III.—FOR DEGREE OF B.Sc.

A.—IN PURE SCIENCE.

FIRST EXAMINATION.

MATHEMATICS—See pp. 544—548.

NATURAL PHILOSOPHY—See pp. 548—553.

CHEMISTRY—See p. 553.

BOTANY—See p. 644.

ZOOLOGY—See p. 645.

FINAL EXAMINATION.

MATHEMATICS—See pp. 564—570.

NATURAL PHILOSOPHY—See pp. 571—577.

ASTRONOMY.

FIRST PAPER—ONE HOUR AND A HALF.

(ONE of each number to be attempted first.)

1a. On the celestial sphere for latitude 60° , sidereal time 18^h , enter the position of a star whose right-ascension is 6 hours and declination $+40^\circ$. Give its azimuth and zenith-distance and estimate its longitude and latitude. Enter the position of the Astronomical Mean Sun if the date be September 23.

1b. State the reason why the pole of the heavens has always the same position with reference to the horizon and meridian.

2a. Draw the celestial sphere for latitude 45° showing a star of declination 0° at its upper culmination. Let the surface of the earth be moved with reference to the axis of rotation (which is supposed to be fixed in direction), so that the place on the earth approaches the pole of the earth by 1° . Show this change in the diagram, and contrast it with the change of the celestial sphere due to a precessional displacement (by 1°) of the earth and its axis towards the star.

2b. How can the declinations of two stars, the latitude of the celestial pole and the constant of refraction be determined? Derive the formulae.

3a. The *Nautical Almanac* gives the "Mean time of Transit over the Greenwich Meridian of the First Point of Aries." With the aid of a diagram find the formula which determines this quantity from the "Sidereal time at Greenwich Mean Noon."

3b. Show that the equation of time depends principally on the obliquity of the ecliptic and the eccentricity of the earth's orbit. [Do not develop into series.]

4a. Full moon occurred 1906 March 10.3. Give the approximate right-ascension and declination of the moon on March 19.5. Draw a diagram of the celestial sphere for March 19 at instant of the moon's culmination and enter the lunar orbit. Sidereal period of the moon = 27.3 days. The node of the lunar orbit passed the First Point of Libra in January 1904.

4b. Let $\frac{da}{dT}$ and $\frac{da'}{dT}$ be the changes of the right-ascensions of the Astronomical Mean Sun and the moon per unit change of hour-angle of the A.M.S. Show that the change of the hour-angle τ of the moon per unit change of the hour-angle T of the Astronomical Mean Sun $\frac{d\tau}{dT}$, equals $1 - \frac{da'}{dT} + \frac{da}{dT}$. What is $\frac{da'}{dT}$ if α' changes $4'.5$ in 10 minutes mean time?

5a. Say what quantity on the celestial sphere measures time. Show with the aid of a diagram that the difference between Greenwich time and local time numerically equals the longitude no matter whether the time is mean solar, apparent solar, sidereal, etc. In what unit must the angle of longitude be expressed?

5b. Define wire-distance and derive the correction to be applied to the time of transit of a star over a wire which reduces it to the time of transit over the middle wire.

6a. Prove that zenith distances measured near azimuth 90° give the best determination of time, while those measured near the meridian are preferably used for the determination of the latitude. Also derive this result from Sumner's lines.

6b. How would you determine the meridian by means of a theodolite?

SECOND PAPER—ONE HOUR AND A HALF.

(ONE of each number to be attempted first.)

1a. The longitude and latitude of a star is to be reduced from a mean equinox to the mean equinox several thousand years back. Drawing a great circle through the position of the star and the intersection of the two ecliptics, bring the co-ordinates into two spherical triangles, and point out the quantities which are known.

1b. Draw the celestial sphere containing the mean equator and its pole and the ecliptic at time t . The principal terms of nutation are $\Delta\psi \sin \epsilon = -a'' \sin N$, $\Delta\epsilon = +b'' \cos N$. Enter the true equator and true pole for $N=180^\circ$ (1904). Further, draw the meridian for a place at which the sidereal time is 0^h and enter the zenith if the latitude is 60° .

2a. Derive the fundamental formula of aberration and draw, in a diagram of the celestial sphere, the spherical triangles which give the effect of aberration on the longitude and latitude of a star.

2b. How is aberration taken into account for an object within the solar system? What direction would be obtained if a planet's apparent position were corrected for aberration in the same way as a star's position?

3a. Define the plane in which parallactic displacement takes place. Draw the spherical triangle which gives the moon's sidereal time of rising and setting, with regard to atmospheric refraction and parallax, by its *geocentric* right-ascension and declination and the latitude.

3b. On the Greenwich celestial sphere, latitude 52° , sidereal time 6^h , enter the geocentric position of a comet, $RA=3^h$, $\delta=+30^\circ$. Draw the meridian and zenith belonging to a place θ of longitude 90° West and latitude $+30^\circ$, and show where the comet stands, as seen (1) at Greenwich and (2) at θ .

4a. Draw the celestial sphere for latitude 60° , sidereal time 18^h . Enter the true heliocentric position of a star, $\alpha=15^h$, $\delta=+45^\circ$, which has an appreciable parallax. Let the date be November 5. Draw (1) the great circle in which the true geocentric position of the star lies, and (2) the great circle in which the apparent geocentric position lies.

4b. On the celestial sphere described round Jupiter, draw Jupiter's orbit and a plane parallel to the ecliptic. Enter the sun, the heliocentric longitude λ of Jupiter being given, and the heliocentric position of the earth, longitude λ' . In what great circle does the earth stand as seen from Jupiter? Point out the two great circles which limit the visible disc of the planet.

5a. Draw the orbit of a comet, eccentricity 0.8. Find graphically the position of the comet in its orbit a quarter of its periodic time after its transit over perihelion.

5b. Let a comet which moves in a parabolic orbit be retarded in its motion by the action of a planet. Prove that the orbit is changed to an ellipse.

THIRD PAPER—TWO HOURS.

(The last THREE questions must be attempted first.)

1. Relate the essential points of the method by which the time of beginning of a lunar eclipse can be found.

2. Define the system of co-ordinates introduced in Bessel's theory of occultations of a star by the moon. What is the maximum value of the y co-ordinate ($y = \frac{\delta - \delta'}{P}$, where δ and δ' are the declinations of the moon and star, P the parallax of the moon) for which an occultation may be possible at some place on the earth?

3. Lagrange's formula of interpolation may be written

$$X = A + (x - a)(a, b) + (x - a)(x - b)(a, b, c) + \dots,$$

where
$$(a, b \dots c, d) = \frac{(b \dots c, d) - (a, b \dots c)}{d - a}.$$

Let a function of a variable be given at equal intervals of the variable and be entered in a vertical column. Indicate how a formula of interpolation can be found which contains the successive differences standing above and below a horizontal line.

4. Derive the differential equations of the motion of a mass round a central mass and prove that the motion is in a plane.

5. Explain how Kepler's equation $M = E - e \sin E$ can be solved, e and M being known quantities.

6. Problem of n bodies $\sum m_i (y_i \ddot{z}_i - z_i \ddot{y}_i) = f$ (constant), etc., the co-ordinates referring to the centre of inertia as origin. Prove that there is an invariable plane with reference to which the total angular momentum is a constant maximum.

7. In $\frac{d}{dt} \frac{\partial T(q\dot{q})}{\partial \dot{q}_k} - \frac{\partial T(q\dot{q})}{\partial q_k} - \frac{\partial U(q)}{\partial q_k} = 0$ substitute instead of \dot{q} new variables p defined by $p_k = \frac{\partial T(q\dot{q})}{\partial \dot{q}_k}$ and derive Hamilton's canonic equations.

8. S is defined by $\frac{dS}{dt} = T + U = H(q, p)$. On the assumption that S can be expressed as a function $S(t, q, a_1 \dots a_i)$, $p_k = \frac{\partial T(q\dot{q})}{\partial \dot{q}_k} = \frac{\partial S(t, q, a)}{\partial q_k}$ where $k=1$ to i and a are i constants of integration.

Show that on this assumption the differential equation leads to a partial differential equation for S .

9. Let $U = c(q_1^2 + q_2^2)^{-\frac{1}{2}}$, $T = \frac{1}{2}m(\dot{q}_1^2 + \dot{q}_2^2)$. Write out (1) the differential equations, using Lagrange's equations, (2) Hamilton's partial differential equation for S . To integrate this latter equation introduce other variables, and starting afresh, derive the equation for S ; find its integral and the integrals of the canonic equations. Do not carry out the quadratures.

10. Give a short account of Hamilton-Jacobi's method of integration of dynamical problems. What is its principal advantage?

FOURTH PAPER—ONE HOUR.

(The lecture notes must be used in connection with these questions. Answer in a sentence, and do not copy formulae unless they are especially asked for.)

Variation of canonic constants :

1. Lagrange's differential equations of the constants of the intermediate orbit contain Lagrange's brackets. Owing to what properties of Hamilton's S function do these equations become simple for canonic constants?

Theory of Perturbations :

2. $H = T - U$ was derived for three bodies, the co-ordinates being Jacobi's co-ordinates. (1) Why was this H function divided into three parts g, g', R ? and (2) Why was it done in the way chosen? (3) What orbit does the g portion determine? and (4) How is R taken into account?

3. (1) Why is Jacobi's constant β_1 of the intermediate orbit replaced by Delaunay's co-ordinate l ? (2) What complication is introduced by the adoption of l ? (3) Why is Delaunay's second co-ordinate L introduced instead of α_1 ?

Integration of dynamical problems :

4. Let $\left(\frac{dq}{dt}\right)^2 = F(q)$ and let $F(q)$ have two unequal roots. (1) What is the period of the "Libration," and (2) How may q be obtained as a function of time though the differential equation may not be integrable?

5. Let the motion have two degrees of freedom.

On the assumption that the kinetic energy does not contain the products \dot{q}_1, \dot{q}_2 . (1) Write out the conditions which must be satisfied if Hamilton's function S is to be expressed by quadratures. (2) Give the integrals of the canonic equations on these conditions.

Motion round two fixed masses :

6. Choose motion No. 16. (1) Show in a diagram the values of the roots $M(x) = 0$, $L(x) = 0$ relatively to $x = \pm c$. (2) Derive the ranges of q_1 and q_2 , mentioning whether there is "libration" or limitation. (3) Explain why the motion is in a spiral.

PRACTICAL EXAMINATION.

1. Calculation of an Ephemeris of a Minor Planet.
2. Determination of Time with the Transit Instrument.
3. Determination of Latitude with the Sextant.

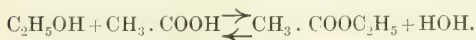
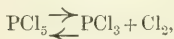
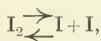
CHEMISTRY.

FIRST PAPER—THREE HOURS.

(Answer SIX questions.)

1. Discuss the relation between the physical and chemical properties of the elements and their atomic weights and explain the classification of the elements which has resulted from this connection.

2. Discuss the conditions which influence the following reactions :



3. Explain the meaning of the term "osmotic pressure" and describe the method of ascertaining its value. What conclusions are drawn from results of the determination of osmotic pressures of salt solutions and how are these confirmed by the results of determinations of electrical conductivities?

4. You are required to determine the solubility of a solid in water at 20°C . ; state exactly how you would proceed. State the conditions which determine the quantity of a gas taken up by a liquid (a) when the gas is pure and (b) when mixed with another gas.

5. Give the modern views regarding the origin and nature of the electromotive force of a galvanic element and explain how the E.M.F. can be calculated from thermo-chemical data.

6. Mention any industrial chemical processes in which electricity is employed and give a detailed description of any one of them.

7. How would you prepare barium oxide from barium sulphate, potassium dichromate and chromyl chloride from chrome iron ore, and potassium permanganate from pyrolusite? Give a detailed description, with equations.

8. State the method of preparation and the properties of any compounds in which lead plays the part of a tetravalent element. Discuss the importance of these from the point of view of the position of lead in the periodic classification of the elements.

SECOND PAPER—THREE HOURS.

(Answer SIX questions.)

1. What variations take place in the rate of cooling and in composition of the substances when (a) a lead-tin alloy containing 15 % tin, and (b) a steel containing 0.5 % carbon, is slowly cooled from the melting point to room temperature?

2. How would you determine the calorific value of a fuel and calculate from it the theoretical evaporative power? Discuss the advantages and disadvantages of the use of oil fuel as compared with coal.

3. State the methods of preparation and the general properties of the hydrocarbons of the olefine series and explain how you would prepare a hydrocarbon of the acetylene series from an olefine. Give the structural formulae of the isomeric amylenes.

4. Give the general methods of preparation and the properties of the aldehydes. By what tests would you identify an aldehyde and how would you prepare a hydroxy-acid from it?

5. Give the structural formula of anthracene and state the evidence on which it is founded. How is alizarine prepared from anthracene?

6. Describe Skraup's synthesis of quinolin and give the properties of the substance. State the methods by which pyridin and its homologues may be prepared synthetically.

7. Give an account of the reactions by means of which the constitutions of dextrose and fructose have been established and show by structural formulae the relation of these substances to each other and to mannitol.

8. How are diazo-compounds prepared and what are their chief reactions? State the views which are held regarding their constitution.

PHYSIOLOGY—THREE HOURS.

1. Answer questions 1, 3, and 5 in the Paper for M.B. See p. 647.

2. Give an account of the experiments of Pawlow and of Bayliss and Starling as regards entero-kinase and secretin.

3. What evidence has been recently offered as to the amount of nitrogen required and eliminated per day by a healthy man?

GEOLOGY.

FIRST PAPER—Two Hours.

1. Describe the composition and structure of the following rocks: diorite; granophyre; gabbro; kersantite; peridotite; pitchstone; picrite; porphyrite; trachyte.

2. Describe three types of glacial deposits, with especial reference to examples that may be seen in the Glasgow district.

3. Describe the Graptolites. State their zoological position, and geological range.

4. Explain the following structures : porphyritic ; graphic (pegmatitic) ; amygdaloidal ; ophitic. What light do they throw on the history of the rocks or minerals concerned ?

5. Explain with sketches an escarpment, unconformity, overlap, syncline, and outlier. Give examples.

SECOND PAPER—THREE HOURS.

(Candidates for B.Sc. in PURE SCIENCE and for M.A. take Questions 1, 2, 3, 4 and 5.)

(Candidates for B.Sc. in ENGINEERING, AGRICULTURE, and PUBLIC HEALTH, take Questions 1, 2, 3, 4 and 6.)

1. State how you would distinguish orthoclase from quartz, and from plagioclase, in hand specimens and in microscopic sections.

2. Describe the chief types of faults ; and how they are formed ; and how they may be recognized in the field.

3. Describe the geology of either the Campsie Fells or the Kilpatrick Hills. Illustrate your answer by a geological section.

4. In what rocks is common salt found in the British Isles ? How are the deposits supposed to have been formed ? What other mineral is often associated with it ?

5. Give the chemical composition, crystallographic system and other characters, of each of the following minerals : gypsum, copper pyrites, haematite, olivine and ilmenite.

6. What are artesian wells ? Describe the geological conditions under which they may occur, and the nature of their waters.

ZOOLOGY.

FIRST PAPER—THREE HOURS.

(Not more than SIX questions to be attempted. Illustrate your answers by diagrams.)

1. Give a brief account of pelagic Molluscs.

2. Write a short general account of the mammary glands of Mammals.

3. Describe the structure of the larva of *Phoronis*, and give some account of its metamorphosis.

4. Describe in outline the mode of development of the thymus.

5. Explain precisely what you understand by the following terms used in connexion with the Molluscan nervous system : *Entotheneury*, *Streptoneury*, *Zygoneury*.

6. On what grounds has it been concluded that the Enteropneusta are related to the Chordata ? Discuss the correctness of this view.

7. Write a short account of the group Dipnoi.
8. Write a general account of the chief features of spermatogenesis.
9. What are "Mutations"? Discuss the part which may have been played by Mutations in Evolution.

SECOND PAPER—THREE HOURS.

(Not more than SIX questions to be attempted. Illustrate your answers by diagrams.)

1. Give an account of the life history of *Doliolum*.
2. Describe the breathing organs in *Fissurella*, *Patella*, *Chiton*, *Buccinum*.
3. Point out the more important resemblances between the Pterobranchia and the Enteropneusta, and comment on the more striking differences between the two groups.
4. Write a short comparative account of the hemisphere region of the brain in the chief sub-groups of Vertebrates.
5. Discuss the question of the position of the Amphineura in the Molluscan series.
6. Give a short account of the chief views held as to the development of the peripheral nerves of Vertebrates.
7. What do you understand by the term Neoteny? Illustrate your answer by special reference to the Amphibia.
8. Write a critical account of the process of meiosis, paying special attention to the precise method in which reduction in number of the chromosomes appears to be brought about.
9. Describe the arrangements of gonads and ducts in a Teleostean fish, and compare them with the corresponding arrangements in other Ichthyopida.

BOTANY.

FIRST PAPER—THREE HOURS.

1. Discuss the peculiarities, and the systematic position of the Piperacea.
2. Give an account of the process of chromosome-reduction. Point out the various positions which that event may hold in the life-cycle in different types of plants.
3. Describe in detail the vascular system of *Equisetum*, and suggest how it may be brought into relation to the stellar structure as seen in the Lycopodiales.
4. Give a comprehensive account of the process of fertilisation as it is seen in the Fungi.
5. What is meant by Mutation? Explain its bearing on the origin of species.

SECOND PAPER—THREE HOURS.

1. Give some account of alcoholic fermentation. Discuss its significance in the metabolic processes. Under what circumstances may there be a formation of alcohol by green plants?
2. Give an account of the phenomenon of root-pressure. Discuss the means whereby it may be produced.
3. Describe the Sphenophyllales, and discuss their affinities.
4. Give an account of the nature and distribution of Apogamy.
5. Give a general account of Mangrove-vegetation.

B.—IN ENGINEERING.

FIRST EXAMINATION.

MATHEMATICS.

FIRST PAPER.—THREE HOURS.

(NOTE.—Candidates may obtain full marks by doing correctly about TWO-THIRDS of this paper.)

1. Use De Moivre's Theorem to prove that $\sqrt[n]{1}$ has n values whose sum is zero.

Prove that $2^4 \cdot \cos^3 \theta \sin^2 \theta = -(\cos 5\theta + \cos 3\theta - 2 \cos \theta)$.

2. In measuring the three sides of a triangle a small error δa is made in one of them, a . Prove that the error in the angle C , calculated from the formula $\cos C = (a^2 + b^2 - c^2)/2ab$ is $-\frac{\delta a}{a} \cot B$.

If $a = 64 \cdot 2''$, $b = 57 \cdot 8''$, $c = 49 \cdot 5''$ with a possible error of $0 \cdot 1''$ in the measurement of a , solve the triangle and calculate the possible error in C .

3. Define e . Write down the value of e^x in a power-series, and prove that the series is convergent for all values of x .

Draw in one diagram the graphs of the hyperbolic functions $\sin hx$, etc. If $y = \sin hx$, and y is any real number, show that there is always one but only one real value of x , and that its value is given by

$$\log(y + \sqrt{y^2 + 1}).$$

4. Given the co-ordinates of the vertices of a triangle, find an expression for the area of the triangle; and deduce the equation of a straight line passing through two points (x_1, y_1) and (x_2, y_2) .

Find the area of the quadrilateral whose vertices are the points $(1, 1)$, $(2, 3)$, $(4, 3)$, $(5, 1)$; both by using your formula and from a figure.

5. Find the locus of the middle points of parallel chords of the parabola $y^2 = 4ax$.

If two circles, one of which is fixed and the other variable, touch one and the same fixed straight line, prove that the locus of the centre of the variable circle is a parabola.

6. Define $\text{Lt}_{x \rightarrow a} f(x)$, and evaluate $\text{Lt}_{x \rightarrow a} \frac{x^m - a^m}{x - a}$ (1) when m is a positive integer, (2) when m is a negative integer.

If $y=f(x)$ represents a curve, prove that the gradient of the curve at the point (x, y) on it is $\frac{dy}{dx}$. Find the gradient of the curve

$$y = \frac{1}{(x-1)(x-2)(x-3)}$$

at the point (x, y) . Find also where the gradient is zero, and trace the curve.

7. Prove that the subtangent of the curve $y=f(x)$ is given by the expression $y \frac{dx}{dy}$.

Prove that the curve $xy^2 = a^2(a-x)$ has a minimum subtangent at the point $(\frac{a}{2}, a)$. Prove that $\frac{dy}{dx}$ changes sign at the point $(a, 0)$, and state why y has not a turning value at that point.

8. Find the equations to the tangent and normal to the curve $y=f(x)$, at any point on it.

Draw the curve $xy=a^2$, find the equation to the tangent at (h, k) and prove that the portion of it intercepted between the axes is bisected at (h, k) .

9. Establish the formula for the radius of curvature at any point of a curve, whose equation is given in Cartesian co-ordinates.

Find the radius of curvature and the co-ordinates of the centre of curvature at the point $(a \cos \theta, b \sin \theta)$ on the ellipse $x^2/a^2 + y^2/b^2 = 1$.

10. Establish Maclaurin's Theorem for the expansion of a function of x in a series of powers of x . If x is positive and less than unity and if m is not a positive integer, show that $(1-x)^{-m}$ satisfies the conditions for expansion in an infinite series by Maclaurin's Theorem, and find the series.

11. Evaluate

$$\int \frac{x^4 dx}{1+x^3}, \quad \int \frac{x - \sin x}{1 + \cos x} dx,$$

$$\int \frac{1 - \sqrt{x}}{1 + \sqrt{x}} dx, \quad \int \frac{d\theta}{\cos^4 \theta}.$$

12. If $f(x)$ is a single-valued continuous and positive function of x , and if A is the area included between the axis of x , the curve $y=f(x)$ and the ordinates $f(a)$ and $f(x)$, prove that $\frac{dA}{dx} = f(x)$: a being a constant.

Find the area in the first quadrant enclosed between the curves $x^2 = 4ay$, $4x^2y = a^3$ (a positive) and the axis of x . What is the geometrical meaning of your result if a is negative?

13. Prove that the superficial area of a surface of revolution about the axis of x is given by the integral

$$2\pi \int y \frac{ds}{dx} \cdot dx$$

taken between proper limits.

Find the area of the portion of the surface of a sphere of given radius, intercepted between two given parallel planes.

SECOND PAPER—See pp. 546—548.

NATURAL PHILOSOPHY.

FIRST PAPER—See pp. 548—550.

SECOND PAPER—See pp. 550—553.

CHEMISTRY—See p. 553.

FINAL EXAMINATION.

NATURAL PHILOSOPHY—THREE HOURS.

(N.B.—Do not attempt more than NINE of the following questions).

[Candidates who have not passed the First Science Examination in Natural Philosophy must attend in the afternoon from 2 to 5 to take the Second Ordinary Paper. See pp. 550—553.]

1. A heavy particle is projected with velocity u to reach a point on the same horizontal plane at a distance $2h$. Show that the angle α which the direction of projection makes with the horizon must satisfy the relation $u^2 \sin \alpha \cos \alpha = gh$.

A smooth tube ACB , fixed in a vertical plane, is a portion of a circular tube of radius a from which the upper part, subtending an angle $2\alpha (< \pi)$ at the centre, has been removed. The line AB joining the open ends of the tube is horizontal. Prove that a particle will perform complete revolutions in a vertical plane if its velocity v at the lowest point in the tube satisfies the relation

$$v^2 = ag \left(\sec \alpha + 4 \cos^2 \frac{\alpha}{2} \right).$$

2. What is a wrench? Show that any system of forces acting on a body can be reduced to a wrench.

Determine the wrench which is equivalent to a system of two equal forces P , acting along two perpendicular lines whose shortest distance apart is d .

3. Show that the attraction exerted by a solid homogeneous sphere on a small body in its interior is proportional to the distance of the body from the centre.

A shell of gravitating matter of uniform density ρ is bounded by concentric spheres of radii a and b , ($a > b$). A fine hole is made in the shell along a radius, and a particle is allowed to fall through it from the outer surface to the centre. Show that if v is its velocity at the centre, and γ is the gravitation constant,

$$v^2 = \frac{4}{3}\pi\gamma\rho(a+2b)(a-b)^2/a.$$

4. Show that any displacement of a lamina in its own plane can be brought about by rotation round a certain point. Define the 'instantaneous centre.'

A uniform rod AB is suspended by two vertical strings attached to its ends. If the string at A is cut, show that the rod begins to turn about B , and that the initial acceleration of its centroid is $\frac{3}{2}g$.

5. Show that a flexible cord of uniform density hangs in the form of the catenary $y = \frac{c}{2}\left(e^{\frac{x}{c}} + e^{-\frac{x}{c}}\right)$, where m is the mass of unit length, T_0 the tension at the lowest point, and $c = T_0/mg$.

If O is the origin and P any point of this catenary show that if a point P' is taken on OP such that $OP'/OP = \text{const.}$ the point P' also lies on a catenary with the same directrix.

Hence, or otherwise, prove that if a uniform flexible cable is stretched between two points AB at the same level, the tension at the ends of the cable is reduced by half if the middle point C is supported by a prop which raises it to the level of A and B .

6. Show that in two-dimensional motion of a body, the rate of change of the angular momentum about the centroid is equal to the moment of the external forces. How is this result applied in the case of impulsive forces?

A square plate $ABCD$ lying on a smooth horizontal plane is struck at A by an impulse I along AB . If m is its mass, and a the length of each edge, show that the angular velocity acquired by the plate is $3I/ma$.

7. A uniform rod AB turns freely on a smooth hinge at A , its lower end B describing a circle of radius a on a smooth horizontal plane. If ω is the angular velocity, m the mass, θ the inclination of AB to the horizontal, show that the reaction of the plane is $\frac{1}{2}m(g - \frac{1}{2}a\omega^2 \tan \theta)$, and find the magnitude and direction of the reaction at A .

8. Establish the equation of a planetary orbit

$$u - \frac{d^2u}{d\theta^2} = \frac{\mu}{h^2}$$

and obtain its solution.

Taking the density of the earth as 5.5 and its radius as $\frac{2}{\pi} \times 10^7$ metres, find the least velocity with which a body must be projected from the north pole in order that it may not return to the earth.

9. Define the centre of buoyancy, and the metacentre of a floating body. Show that if G is the centroid of a floating body, B the centre of buoyancy, V the volume immersed, A the area of flotation, k the

radius of gyration of A about a principal axis P in its plane, the equilibrium is stable for small displacements about P if $BG < Ak^2/V$.

Explain how the position of the metacentre is determined by shifting weights on deck, pointing out how the measured quantities are combined to get a result.

10. Show that the free surface of a heavy liquid rotating about a vertical axis is a parabola.

A level is made of a horizontal tube PQ of length l , with short narrow tubes fitting into it at each end A, B, P, Q . All the tubes contain water. It is set on a stand which rotates n times per second about a vertical axis R between P and Q , distant x from P . Show that the difference of the heights of the free surfaces in the vertical tubes is

$$\frac{\omega^2}{2g} (l^2 \sim 2lx).$$

11. If P, Q, R be the principal stresses in an isotropic solid, deduce (stating any assumptions) the stress-strain relations. From these relations prove that in the case of strain produced by simple longitudinal stress, the ratio of lateral contraction to longitudinal extension is $(3E - 6n)/6n$, where E and n are the Young's modulus and rigidity modulus respectively.

12. Explain how the Young's modulus may be obtained by experiments made by bending a thin rod. Work out the elementary theory of the method.

A thin bar is supported at its ends. A weight W placed at a point P between the supports produced a certain displacement at a point Q . Prove that if W be placed at Q the same displacement will be produced at P .

13. Explain reversibility in a thermodynamic engine and show that all reversible engines are equally efficient. Hence define temperature on the absolute thermodynamic scale. Wherein consists the advantage of this scale?

Find expressions for the work done in each operation of a Carnot's cycle when the working substance is a gas, and, proving that the two adiabatic operations give neither gain nor loss of work on the whole, find an expression for the efficiency.

ENGINEERING.

FIRST PAPER—Two Hours.

1. Give an account of the processes by which cementation steel is produced, beginning from pig iron.

2. Describe the Open Hearth process for the manufacture of Mild Steel and state any modifications of the process that are adopted to meet various conditions.

3. Give some account of the influence of various impurities on iron and steel. State what particular kinds or qualities of material you would consider specially suitable for each of the following: Railway rails, boiler furnace tubes, axles for rolling stock, a steam engine cylinder, couplings for rolling stock.

4. Give some account of the chief applications in Engineering work of lead, copper, and aluminium irrespective of their use in the form of alloys.

5. Give a short account of the modes of shrinkage of timber and account for the difference in the shrinkage in different directions. Give some examples of methods adopted successfully and unsuccessfully to minimise the effects of shrinkage in different articles.

6. Define Velocity Ratio, Mechanical Advantage and Efficiency of a Machine. Deduce the relationship existing between these. In a lifting mechanism in which an effort of 44 lbs. is able to overcome a resistance of 1200 lbs. and an effort of 104 lbs. is able to overcome a resistance of 3000 lbs., find the probable effort required to overcome a resistance of 2000 lbs. If the velocity ratio of the machine is 40, what will be its efficiency when raising the above loads? Will the machine overhaul?

7. If T_1 and T_2 be the limiting tensions in the two sides of a belt deduce an expression for the ratio of T_1 to T_2 and explain the assumptions involved. 400 H.P. is to be transmitted by means of ropes from a pulley 20 feet diameter making 80 revs. per min. to a pulley 5 feet diameter; the breaking strength of the rope is 8000 lbs. (inch)² of apparent sectional area; working stress is $\frac{1}{3}$ breaking stress. If the ratios of the tensions on the two sides of the pulley be 4:1, find the number of ropes of a reasonable size required.

8. Define Moment of Inertia. What is the moment of inertia of a solid disc flywheel 5 feet outer diameter and 10 inches thick? What would be the moment of inertia of a flywheel, of the same weight as the above, whose rim had an outside diameter of 9 feet and an inside diameter of $7\frac{1}{2}$ feet, neglecting the mass of the arms and boss? If an exactly similar flywheel of $\frac{1}{8}$ the dimensions of the second one were built, what would be its moment of inertia?

9. Describe and prove some method of determining the crank effort diagram in the case of a double-acting, horizontal, reciprocating steam engine when the indicator diagrams and all other necessary data are given. How would you correct these crank effort diagrams for the inertia of the reciprocating masses?

Sketch approximately the diagram of inertia stresses for the piston rod of a horizontal engine of which the reciprocating masses weigh 1000 lbs.; diameter of cylinder, 18 inches; stroke, 1 foot; revs. per minute, 300; connecting rod = 5 cranks.

SECOND PAPER—TWO HOURS.

(Not more than SIX questions are to be attempted.)

1. Deduce Simpson's rule, the Trapezoidal rule and the Middle Breadth's rule for areas, and apply them to calculate the area of a strip of land across which the following measurements have been made at intervals of one chain: 0, 18, 30, 42, 50, 54, 48, 29, 25. Which result would you consider most correct?

2. Explain three methods of calculating volumes of railway earth-works; discuss their relative merits and find by each of the methods

the volume of a block of earthwork having a length of 66 ft., width of base 27 ft., side slopes $1\frac{3}{4}$ to 1, and end depths 9 ft. and 15 ft. respectively. Discuss with reasons the relative merits of the methods you describe, as applied to the determination of the volume of a long cutting through a hill.

3. To obtain the length and bearing of a line AD , between the ends of which high ground intervenes, a traverse survey was made and the following measurements noted :

$AB=9,640$. $BC=12,860$. $CD=7,680$. Bearing of AB , $65^{\circ} 20'$. Angle ABC , $110^{\circ} 15'$. Angle BCD , $105^{\circ} 28'$.

Explain how you would conduct the above survey, and calculate the length and bearing of the line AD , entering your work in a tabular form suitable for use in plotting.

4. Describe, with the aid of sketches, the construction of a transit theodolite, and explain its various adjustments.

5. With respect to levelling operations, deduce a formula for the error due to the curvature of the earth and state a usual value for the error due to atmospheric refraction.

How may these errors be eliminated in practice? and what other error or errors are eliminated at the same time?

In levelling for a section the following readings were taken: 1.68, 3.40, 7.80, 12.56, 1.32, 4.20, 8.45, 13.62, 4.84, 8.20, 12.63. The level having been moved between the 4th and 5th readings, and again between the 8th and 9th readings, enter the readings in the form of a level book, cast it up and ascertain if your arithmetic checks.

6. The two straight reaches of a railway intersecting, when produced, at an angle of 80° are to be connected to a circular curve of 20 chains radius by Froude's transition curves.

The cant being adjusted for a speed of 50 miles an hour and the length of each of the transition curves being 300 times the cant, determine the cant and show how the curves are located.

7. Describe, with the aid of sketches, the construction and action of a steam navvy, stating for what purposes and under what circumstances its application is specially suitable. Working in a suitable material (which you are to name), state the amount of excavation, in cubic yards per day, you would expect from it: and the cost per cubic yard. State what items you include in the cost you name.

8. In proceeding to select a site for a proposed impounding reservoir state the considerations which would influence your choice: and, having selected a site, explain how you would proceed to make a contour survey of the site and estimate the capacity of the reservoir.

THIRD PAPER—Two Hours.

(Not more than six questions are to be attempted.)

1. Explain the meaning you attach to each of the following terms: dry saturated steam; internal energy of steam; sensible heat of steam; total heat of steam at constant pressure.

The calorific value of a coal is 13,500 B.T.U.'s per lb. How many lbs. of water per lb. of coal burned could be evaporated "from and at 212° F.," assuming that $70\frac{7}{10}\%$ of the available heat is utilized in the process?

2. Define Entropy. Explain how a temperature entropy diagram is constructed for water and steam. Show how a temperature entropy diagram can be used to solve problems relating to the changes that take place in the dryness of steam, expanded adiabatically or otherwise.

From the expressions for the entropy of boiling water and dry saturated steam, deduce the "adiabatic equation for steam."

3. State what data you would require in addition to the indicator diagram, in order to determine for each point of the stroke, the dryness of the water substance in an engine cylinder. State what assumptions are made and show how to draw the "saturation curve" on the indicator diagram.

4. Discuss the action of steam jackets in connection with steam engines, and state the conditions under which the best results are obtained.

5. The analysis of a certain coal is :

C	= 77.5
H	= 5.6
N	= 1.0
S	= 1.1
O	= 8.7
Ash	= 4.0
Water	= 2.1
	<hr/>
	100.0

Find the volume of air per lb. necessary for the complete combustion of this coal.

6. Describe any two forms of "steam calorimeter," explaining the principles upon which they act, and the precautions that should be taken in their use. Discuss their relative merits. How could you find how much of the moisture in a sample of steam is due to priming and how much to condensation in the steam pipes?

7. Discuss the relative advantages and disadvantages of surface condensers, jet condensers, ejector condensers, and evaporative condensers (or any of these) in the case of marine engines and in the case of land engines.

8. Describe any form of oil engine or petrol engine with which you are familiar, dealing with the admission of air and fuel, the ignition system, and the consumption of fuel per brake horse-power hour.

FOURTH PAPER—THREE HOURS.

(Not more than EIGHT questions are to be attempted.)

1. Discuss the advantages of hollow over solid shafts, illustrating your answer by reference to a propeller shaft 15 inches in diameter with a 4-inch hole bored through it. Give numerical data as far as these are required for the elucidation of your answer.

2. Discuss the influence of abrupt discontinuity of form in the strength of structural parts, illustrating your answer by reference to various actual or assumed cases.

3. The thickness of cast-iron water pipes is calculated on the assumption that the pipes are "thin" and that the stress in the material may be about 1900 lbs. per square inch. Find a suitable thickness for a pipe 30" diameter to bear a head of water of 150 feet. Discuss the question of the strength of bends, tee pieces, and four-way pieces in pipes. How would you design such pieces in order to have approximately the same factor of safety as in straight lengths?

4. A chain hangs between two points *A* and *B*, at a horizontal distance of 20 feet apart, *A* being 8 feet and *B* 6 feet above the level of the lowest point of the chain. Find the greatest and least tensions in the chain when carrying a load of 100 lbs. per foot horizontally measured, and construct a diagram from which the tension at any point of the chain can be determined, giving the scale by which the measurement is to be made. In what manner would the curve in which the chain hangs and the relative tensions at different parts be altered if the same load were uniformly distributed along the length of the chain?

5. A shaft is driven by a belt acting on an overhung pulley 3 feet in diameter making 150 revolutions per minute. The centre line of the belt is 1 foot from the centre of the last bearing of the shaft. The belt transmits 20 H.P.; the tension in the tight stretch of the belt being $2\frac{1}{2}$ times that in the slack stretch. Find the diameter of the shaft if the greatest stress in the material is 6000 lbs. per square inch.

6. For a beam carrying an irregularly distributed load, show the connection between a diagram representing the variation of load intensity along the beam, and the diagrams of shear, bending moment, curvature, slope and deflection for a beam of uniform section.

Illustrate your answer by reference to a beam supported at its ends.

7. A steel girder of I section is to be carried continuously over an indefinite number of equal spans of 20 feet and to carry a uniformly distributed load of 800 lbs. per foot run. Find a suitable section for the girder, specifying the factor of safety you use.

Sketch the curve of bending moments for one span of the girder.

8. Discuss the question of the relative weights per horse-power of large and small steam engines of approximately similar design, proving the principles on which you found your assumptions as to the relative speeds at which the engines could be run with like safety.

9. Investigate an expression for the reaction of a jet of water issuing from a vessel in which the bulk of the water is sensibly statical, and apply it to the discussion of the area of the jet at the vena contracta in some special cases.

10. Describe the Venturi meter as applied to the measurement of the rate of flow of water in pipes, and give the principal dimensions of a meter that would indicate by a height of mercury column of 2 feet, a flow of 6 gallons per minute through a pipe of 6" diameter.

11. A pipe 3 miles in length connects two reservoirs in which the difference of free levels is 30 feet. Find the diameter of the pipe required to deliver 18,000,000 gallons per day.

Show the connection of the formula you use with the results obtained by Prof. Reynolds in his deductions from experimental results.

ENGINEERING DRAWING AND DESIGN.

FIRST PAPER—THREE HOURS.

1. The profile of a cam is in the form of an ellipse having the major axis 3" in length and the minor axis 2" in length. The cam rotates in a vertical plane about an axis through one of its foci, and actuates a tappet rod in a vertical line through the axis, the diameter of the tappet roller being 0.5". A pencil is attached to the upper end of the tappet rod and bears against a sheet of paper which moves horizontally at a uniform rate of 4" for one revolution of the cam. Draw the curve traced by the pencil on the paper.

2. Show by the aid of sketches, how you would solve the following problems :

(a) Draw from a point P , $1\frac{1}{2}$ " from each of the planes of projection, a line PQ , 2" in length, making an angle of 45° with the H.P. and 30° with the V.P.

(b) Through the point P in (a) draw a plane inclined to the H.P. at an angle of 60° and to the V.P. at an angle of 45° .

(c) The H.T. and V.T. of a plane make angles of 30° and 45° respectively with the ground line. Draw the projections of a line 3" in length between its traces lying in the given plane and inclined to the H.P. at an angle of 30° .

3. From the given point P in the figure shown on the accompanying sheet, draw : (1) a line PQ inclined to the H.P. at an angle of 60° and intersecting the given line AB , (2) a line PR intersecting, and making an angle of 60° with, AB .

4. Draw a plane inclined at 60° to the H.P. and touching the cylinder shown (partly) on the accompanying sheet.

5. Draw the projections of the curve of intersection between the cone and cylinder shown on the accompanying sheet.

6. Make an isometric projection of the crank and pin shown on the accompanying sheet.

7. Draw a diagram of stresses for the bridge frame shown on the accompanying sheet when loaded with a dead load of 10 tons per panel and an additional (live) load of 20 tons per panel for the first three panels only.

SECOND PAPER—THREE HOURS.

PART I.

(Two questions only are to be attempted.)

1. Discuss briefly the effect of varying and repeated stresses upon the ultimate strength of materials, and illustrate your answer by reference to a curve drawn roughly to scale, showing, for mild steel, the effect for various values of the ratio : $\frac{\text{range of stress}}{\text{ultimate strength}}$. Write down a formula giving the safe strength in terms of the safe statical strength and the ratio : $\frac{\text{minimum stress}}{\text{maximum stress}}$, and explain the assumptions on which it is based.

2. In a steam engine having a Meyer valve gear the cut-off takes place at .25 stroke, the release at .95 stroke, and the angle of lead is 10° . Determine, by the Harmonic-diagram method, the lap of the expansion valve, the laps and lead of the main valve, and the point of compression; having given the following data:

Length of connecting rod = $5 \times$ crank radius

Travel of main and expansion valves = $3''$

Angle of advance of main eccentric = 130°

Angle of advance of expansion eccentric = 180°

3. With respect to wheel loads at fixed distances apart passing over a bridge, explain the meanings of the expressions: "equivalent uniform live load derived from maximum bending moment" and "equivalent uniform live load derived from maximum shearing force"; and show how these equivalent loads are obtained by reference to a case of three wheel loads moving from end to end of a beam.

PART II.

Design and make detailed drawings of one of the following:

(a) The longitudinal and circumferential joints of the shell of a marine boiler having a diameter of 10 feet and suitable for a working (gauge) pressure of 150 lbs. per square inch.

(b) About 20 feet of the middle part of a girder suitable for a clear span of 70 feet, a dead load of 1 ton per foot run, and a line load of 2 tons per foot run.

(c) A conical cast steel piston suitable for the high pressure cylinder of a marine engine, the diameter of the cylinder being $26''$ and the initial steam pressure 200 lbs. per square inch.

GENERAL LABORATORY EXAMINATION.

THREE HOURS.

[THREE questions are to be attempted, of which ONE (and ONE only) must be from Group A.]

In answering each question you are to deal with (a) the apparatus and instruments employed, (b) the setting up and adjustment of apparatus, (c) the booking of observations, (d) the calculation and probable accuracy of your results.

A.

1. Describe how you would carry out a complete test of a gas or petrol engine. Illustrate your description by giving probable numerical values of the measurements taken in the test of a 15 H.P. gas engine, or of a 5 H.P. petrol motor, and find from these the mechanical and thermal efficiencies. Discuss the probable accuracy of the indicator diagrams.

2. Explain fully how you would carry out complete tests, in compression and tension, of a specimen of mild steel. How would you

determine Young's Modulus for the specimen? Discuss the effect of rapidity of testing and also of removing the stress after passing the Elastic Limit.

3. Describe in detail how you would determine the Efficiency of a shunt wound continuous current Generator at $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and full load. Criticise the assumptions involved in the method adopted.

4. How would you carry out a complete test on a 10 k.w. single phase transformer? Compare the direct with the indirect method of obtaining the efficiency. Why is the indirect method usually preferred?

B.

5. Describe a complete test of (a) a high-speed compound steam engine, (b) a de Laval steam turbine, both condensing and non-condensing.

6. How would you make a complete torsion test on a specimen of wrought iron? What will be the effect of removing the stress after the elastic limit has been passed?

7. Describe with sketches a Pelton wheel or a Thomson turbine. How would you carry out a complete test of one of the above turbines, paying particular attention to the most economical speed for running under given conditions of head of water, etc.?

8. How would you determine the flow of water over a rectangular gauge notch? Discuss the formulas customarily used for the calculation of such flow.

9. Describe some modern practical form of potentiometer. How would you use the potentiometer to calibrate an ammeter reading from 0 to 100 amperes, and a voltmeter reading from 0 to 250 volts?

10. How would you determine the combined efficiency of a continuous current 500 volt tramway motor set when the motors are geared through similar spur wheels to the same counter shaft? Criticise the method adopted. How would you determine experimentally the efficiency of a series generator or motor when only one such machine is at hand?

11. Describe in detail two methods of determining the efficiency of a 10 h.p. polyphase asynchronous motor. How would you find the values of the various losses in such a motor and also have some check on the accuracy of your results?

ELECTRICAL ENGINEERING.

FIRST PAPER—THREE HOURS.

(Only SEVEN questions to be answered.)

1. Define Coulomb, Ampere, Watt, Joule. What is the connection between the foot lb., the Watt, the Joule and the erg? A glow lamp takes a current of 0.2 amperes when the difference of potential at its terminals is 250 volts. What is its resistance? and at what rate is energy being expended in foot-pounds per second?

2. A dynamo generates current at 260 volts and supplies current to 50 arc lamps, each taking 10 amps. at 50 volts and to 500, 16 c.p., incandescent lamps each taking 0.24 amperes at 250 volts. The arc lamps are connected in groups of 5 in series between the mains. The dynamo is at a distance of 100 yards from the building in which these lamps are placed, and the main leads consist of two $37/16$ stranded copper cables in parallel. Calculate approximately (a) the drop of potential in the main cables connecting the dynamo to the building, (b) the output of the dynamo in kilowatts. The diameter of a number 16 wire is 0.062 inches. Specific resistance of copper 1.6 microhms per cm. cube. Neglect the resistance of the leads in the building.

3. Describe the construction and preparation of some storage cell, paying particular attention to the forming of the positive and negative plates. A shunt-wound generator is to be employed to charge a storage battery; describe with the aid of diagrams of connections how you would connect up the dynamo in series with a booster to the terminals of the battery. Why is the booster employed?

4. Define Permeability, Magnetomotive force and Reluctance, and deduce an expression connecting the Flux, the M.M.F., and the reluctance in a magnetic circuit. A wrought iron ring $7\frac{1}{2}$ cms. mean radius, and 10 sq. cm. cross-section has a gap 5 mms. wide cut across it. The ring is wound uniformly with a number of turns and when a current of 5 amperes is flowing, the field strength in the gap is 10,000. Neglecting the fringing of the flux find the number of turns if the permeability of the iron is 1000.

5. Show clearly by means of diagrams the main difference between parallel and series (wave) winding in the armature of a continuous current machine. Assume for purposes of illustration a four-pole drum wound armature with 24 conductors. Why is the series winding often better than parallel winding, voltage considerations being neglected?

A drum-wound armature for a 12 pole machine has 1440 conductors and is parallel wound; the resistance of each conductor together with its end connections is 0.005 ohms, determine the resistance (copper) of the armature.

6. Show clearly with the aid of sketches the main differences between series, shunt and compound wound generators. How would you determine the magnetic characteristic (a) of a series, (b) of a shunt wound generator?

Sketch carefully the probable external, load characteristics of the above three types of machines if each is to supply 100 amperes at 250 volts.

7. What is meant by "armature reaction," and detail the different ways in which it affects the working of a continuous current generator? Show by means of diagrams the action of the current carrying conductors in a two-pole generator on the field of the same.

8. State the conditions required for sparkless commutation and the chief causes of sparking at the commutator. How is the sparking overcome in modern continuous current machines? You must describe completely one method adopted in modern machines to assist the commutation.

9. Deduce an expression for the torque of a continuous current motor, and find the torque in the following case, Armature Series wound with 490 conductors: E.M.F. = 500 volts; speed 750 revs. per minute; the motor has 4 poles and the external current is 50 amperes.

10. What is meant by the term effective E.M.F. of an alternator? Deduce the relationship between the Maximum and the effective E.M.F.'s for alternating waves of sine form.

11. Define Inductance and self-inductance of an electric circuit, and prove that if an alternating E.M.F., $e = E_0 \sin \omega t$ be applied at the terminals of an electric circuit of ohmic resistance r , and reactance $x = 2\pi N L$, where N is the frequency of the applied E.M.F., a current $i = I_0 \sin(\omega t - \theta)$ will be obtained in the circuit where $I_0 = E_0 / \sqrt{r^2 + x^2}$ and $\tan \theta = \frac{x}{r}$.

SECOND PAPER—THREE HOURS.

Only SEVEN questions may be attempted.

Wherever possible all E.M.F.'s and currents are to be represented in their proper time phases by vectors in the customary manner.

1. Define Inductance, Self Inductance and Mutual Inductance. Deduce the relationship existing between the inductances L_1 and L_2 , the self inductances S_1 and S_2 and the mutual inductance M of two electric circuits of n_1 and n_2 turns respectively, and determine approximately the mutual inductance of two concentric coils, the primary of which contains 1000 turns, has an axial length of 50 cms, and a mean cross-section of 100 (cms.)², whilst the secondary coil has also 1000 turns of fine wire and is wound closely round the middle of the primary.

2. Prove, without the use of differential equations and neglecting the hysteresis losses, that if an alternating E.M.F., $e = E_0 \sin \omega t$, be applied at the terminals of an inductive circuit of ohmic resistance r , and reactance x , that the current i , induced in the circuit, will equal

$I_0 \sin(\omega t - \theta)$, where $I_0 = E_0 / \sqrt{r^2 + x^2}$, and $\tan \theta = \frac{x}{r}$. Represent all

E.M.F.'s and currents by their sine waves and also by vectors in their proper phase relationships. Two coils of resistances 2 and 4 ohms and self inductances 0.1 and 0.4 henrys respectively are connected in parallel. What is the equivalent resistance, self inductance and impedance of the combination? The frequency of the applied E.M.F. is 100.

3. How would you determine experimentally the hysteresis and eddy current losses in a sample of transformer iron? How may these losses be separated from each other and how will each vary with varying thickness of the iron sheets? You are given a transformer with open secondary circuit. At the terminals of the primary circuit (a) various alternating E.M.F.'s of constant frequency are applied, (b) a constant E.M.F. of varying frequency is applied. How will the energy consumed in the transformer vary in both cases, the ohmic resistance of the primary circuit being assumed equal to zero?

4. In a single phase, double core transformer the mean cross-section of the flux path is 180 (cms.)^2 , the mean length of the flux path is 170 cms. , and the core sheets are 0.5 mms. thick. Number of turns of wire in the primary circuit = 150 of cross-section 0.35 (cms.)^2 ; number of turns in the secondary circuit = 1560 of cross-section 0.073 (cms.)^2 ; E.M.F.'s 600 volts and 6240 volts respectively.

Ohmic resistance of primary circuit = 0.0256 ohms , and of secondary circuit = 2.78 ohms .

With the aid of the given curves calculate the probable iron losses in the core, the copper losses in the conductors if the full load currents are 125 amps. and 12 amps. respectively. The frequency of applied E.M.F. is 40 . What will be the probable efficiency of the transformer at full load, and indicate how the no load current could be obtained if a B.H. curve of the transformer iron were at hand and there is an air gap of 1 mm. in the flux path?

5. Show how the various currents and E.M.F.'s in an ordinary voltage transformer may be represented in their proper phase relationships by means of vectors in a vector diagram. Show by means of the diagram the effect of the ohmic resistance of the coils and of the magnetic leakage of the flux on the secondary terminal E.M.F. and hence show that the second effect may be obtained by assuming no leakage and an inductance in series with the transformer. Deduce the diagram for the case when the secondary coil is short-circuited and explain the importance of this short circuit diagram.

6. Deduce an expression for the "breadth factor" for a uniformly spaced armature winding in an alternate current generator. Find the breadth factor in the case of a three phase alternator with $2 \text{ slots per pole per phase}$.

Prove that, in a three phase alternator, when star connected, (a) the line E.M.F. is $\sqrt{3}$ times the phase E.M.F. and (b) if the phase E.M.F. contains a harmonic of three times the frequency of the fundamental, this harmonic will not appear in the line E.M.F. when star connected, but may in a delta connected armature produce large idle currents in the armature of the generator.

7. In a three phase alternator prove that the armature current carrying conductors produce a uniformly rotating magneto-motive force, and show, by means of diagrams, the action of this M.M.F. on the rotating field magnet system for "lagging," "leading," and "in phase" currents.

8. Show how we may, by taking account of the armature reaction in an alternator, deduce the short circuit characteristic or any load characteristic with constant current I and power factor $\cos \phi$ from the open circuit or magnetic characteristic.

9. State the various conditions which must be fulfilled before two alternators can be paralleled, and show clearly, by means of diagrams in each case, the effect of paralleling when one of these conditions is not fulfilled. Deduce an expression for the natural period of free vibration of two parallel running, alternate current generators when by some cause one of them gets slightly in advance of the other.

10. Describe by means of diagrams the stator and rotor connections of some modern compensated single phase commutator motor, and describe the various interactions taking place in the motor. How might this motor be used for both alternate and continuous currents?

GEOLOGY AND MINERALOGY—See pp. 608, 609.

NAVAL ARCHITECTURE.

STABILITY AND ROLLING—Two Hours.

(EIGHT questions to be answered.)

1. An inclining transverse force F at an angle θ to the horizontal heels a vessel over to an angle α . State clearly how the inclining couple due to this force is resisted. Make a sketch.

2. Define metacentre and centre of flotation. Prove that a surface of buoyancy can have no re-entrant parts. Show that stable and unstable positions of equilibrium occur alternately for one direction of inclination.

3. Given the GZ curve (and BG for the upright) for a range 0° to 90° construct the corresponding isovol. If the displacement is 50 % of the total volume, show how to complete the isovol for 0° to 360° .

4. Given the curves of metacentres and centres of buoyancy in terms of volume, show how to obtain the positions of the water plane and the centre of flotation for any volume. State the other properties of these curves.

5. Prove that the tangent to the isocline passes through the CG of the corresponding waterplane. Draw the 45° isocline for a rectangular vessel whose breadth is twice its depth.

6. Describe fully how to obtain by measurement of ordinates and arithmetical calculation the GZ for a given inclination and a given displacement.

7. Deduce the period for a vessel rolling unresistedly in still water. Find period of an Atlantic liner. Radius of gyration = 18 ft., $GM = 2$ ft.

8. Describe means which have been adopted to reduce rolling of a vessel at sea. What is the effect of loose water in a vessel while rolling?

9. Point out the inaccuracy in the ordinary formula for the period of rolling when GM is small. Give a correct equation to rolling for a wall-sided vessel.

RESISTANCE AND WAVES—Two Hours.

1. State and prove the Law of Comparison for ship forms.

2. Describe Froude's experiments on frictional resistance of planes and state the general conclusions reached, giving the values of " f " and " n " in the formula $R = A f v^n$.

What reasons exist for believing the law applies to planes under conditions very much beyond the limit of Froude's experiments?

3. A model 14 ft. long having a displacement of 4 of a ton has a resistance of 20 lbs. at 5.92 knots. Its wetted surface is 35 sq. feet. Find the resistance of a ship 350 feet long of the same form moving at 29.6 knots.

4. Apply the principle of momentum to find the efficiency of a jet propeller.

5. Obtain the equations for thrust and torque of an element of a blade of a propeller.

6. Explain how the equation $G = .00312 nSD^2V^3$ is obtained, and describe the experiments made to obtain values of S for given propellers.

7. What is the relation between propeller and turbine efficiency? Explain the principal cause of loss of the latter in terms of revolutions, and show how the combined efficiency of the two can be shown in a diagram.

8. Describe the construction of a trochoidal wave, and obtain the formula

$$r = r_0 e^{-\frac{r}{R}}$$

9. Find the length of a trochoidal wave moving at a speed of 20 knots. Suppose its height is $\frac{1}{20}$ th of its length, what will its total energy per foot be?

STRENGTH—Two Hours.

(EIGHT questions to be answered.)

1. Show that in still water a curve of section of a floating body is a curve of pressures with the waterline as base.

2. Describe how to take account of wave pressures in a trochoidal wave.

3. Prove the relation which exists between the curves of loads, shearing forces and bending moments. Do one of the following examples.

(a) A rectangular vessel $100' \times 21' \times 5'$ draft having a uniform weight of hull carries at each end a load of 50 tons spread over 10 ft. Find the maximum shearing force and bending moment.

(b) A vessel whose curve of areas is a curve of versed sines has a uniform weight of hull one-half the displacement. It has a uniformly distributed load over $\frac{1}{2}$ length ϕ . Find the maximum shearing forces and BM in terms of Δ and L .

4. Obtain a formula for stress in a vessel inclined θ to the upright when moment is M . Suppose vessel of Question 3(a) to have a structure of $\frac{1}{4}"$ plating and to be 10' deep. Find the maximum stresses at an angle which would just immerse the deck edge in still water.

5. Define modulus of elasticity in a uniform bar. What is its value? Describe a method of finding E in a ship's structure, and explain how it appears to vary.

6. Explain the action of a series of uniform waves upon a ship moving at right angles to their crests. What is the effect upon the hogging and sagging moments as compared with those assuming the vessel to be instantaneously poised on the crest or in the hollow?

7. Deduce the ultimate strength of a butt. Give sizes.
 8. At what parts of the structure is the tensional stress a maximum, and what is its amount in (a) an Atlantic liner, (b) a torpedo boat destroyer? Where is the shearing stress a maximum? How much is it in (a) and (b)?
 9. Explain the method of standardising strength calculations, and give fully the reasons for choosing a standard wave of $L \times \frac{L}{20}$.
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CALCULATIONS AND DESIGN—TWO HOURS.

(EIGHT questions to be answered.)

1. Given a curve of areas of waterplanes; describe how to obtain the displacement and vertical centre of buoyancy curves.
2. Prove that the reading of the wheel of the planimeter is a function of the area within the closed curve which has been traced.
3. The cross-section of a prismatic vessel is as shown. Draw the curves of displacement and v.c.B. Load draft = δ .
4. Draw the standardised *KM* curve for the vessel in Question 3. Load draft = δ .
5. In the inclining experiment of a vessel of 2000 tons displacement, 1.5 tons moved through a transverse distance of 25 feet gives a deflection of 1 in. in a pendulum 9 feet long. A double bottom tank 22 ft. broad \times 12 ft. long was half full of water during the experiment. Find the *GM* if there had been no loose water.
6. The waterplane of a submarine in the awash condition is as shown in the accompanying diagram, the figures (0', 1.8', 3.5', 4', 3.2', 1.5', 0') indicating the semi-ordinates, and the distance between 0' and 0' being 54 ft. Find the moment to change trim 1 in. transversely and longitudinally. The length of the vessel is 100 feet and the displacement is 300 tons. The value of *BG* is 1 foot. *G* is lower than *B*.
7. Describe the launching operation of a large vessel. Make sketches showing how the cradle is fitted at the ends. Give the breadth of ways, inclination, draught of water necessary for a merchant vessel of 5000 tons launching weight.
8. Find suitable dimensions of a vessel to carry 5000 tons cargo at a speed of 10 knots for a distance of 2000 knots, on a load draft of 25 feet. Vessel to be a 3 decker of .75 block coefficient.
9. Give values of the coefficients for hull and machinery weights for different types. How are the weights of the steel structure classified during the construction of the vessel?

MARINE ENGINEERING.

FIRST PAPER—Two Hours.

1. Make a sketch showing a transverse section through a cylindrical boiler. Give the sizes corresponding to the diameter of boiler you choose.

2. Give particulars of size and number of furnaces, length and diameter of boilers, H.S., G.A., etc. for a boiler installation for 4000 I.H.P. Make a sketch of a suitable arrangement.

3. Make sketches of (a) fitting of furnace mouth, (b) connection of furnace to combustion chamber, (c) connection of tubes and stay tubes to end plates, (d) service tubes and retarders.

4. Describe with the aid of sketches the system of forced draught commonly fitted in merchant vessels. Enumerate the advantages of forced draught over natural draught.

5. Sketch and describe any form of large-tube watertube boiler. Carefully describe the circulation of the water. Sketch any form of mud-box.

6. Make sketches of the Yarrow and the Normand types of watertube boilers. Point out the main features of small-tube boilers as compared with large-tube boilers.

7. Sketch an indicator card showing the different occurrences during one revolution. Prove that

$$P_c = P_1 \left(1 + \frac{\log_e \gamma}{\gamma} \right) - P_2.$$

SECOND PAPER—Two Hours.

1. Find the total mean pressure referred to LP , given the mean pressures as follows: $HP = 100$, $M = 40$, $LP_1 = 20.5$, $LP_2 = 20$. Sizes of cylinders $26'' \times 42'' \times 2$ @ $48''$. If revs. = 180 and stroke = 2.5 feet, find the HP developed in each cylinder.

2. Find the sizes of cylinders for a slow-going cargo vessel single screw to develop 2000 I.H.P. Boiler pressure = 150 lbs.

3. Show that reciprocating masses can be treated in the same way as rotating masses. Make tables of weights and moments, etc., and sketches of polygons for the balancing of a four-crank engine, taking account of valve masses.

4. Sketch the usual form of cylinder lines and discuss the effect of steam jacketing.

5. Make sketches showing how the blading is fitted in a turbine. How is steam leakage prevented at the ends of the drum and at the after end of the astern drum?

6. Make a sketch of a longitudinal section through an LP turbine showing the fitting of the astern turbine.

7. A 5000 I.H.P. turbine has a consumption of water at the rate of 15 lbs. per I.H.P. per hour at full speed when the revolutions = 500 for the *HP* turbine. The length of first row blades is 1'. The diameter of *HP* drum is 30' and the angle of blade is 30° . Find the steam speed at the first row. Pressure at *HP* receiver = 150 lbs.

ELECTRICITY PURE AND APPLIED—THREE HOURS.

1. Distinguish between magnetic force and magnetic induction in a magnetisable substance. Prove the relation $B = H + 4\pi I$.

Describe the magnetometric method of finding a hysteresis cycle for a rod of magnetic metal, pointing out carefully the corrections which require to be applied in the case of a comparatively short rod.

Give some account of the Heusler magnetic alloys.

2. Describe three methods of using the wire bridge to obtain an accurate measurement of resistance. Point out various possible sources of error, and explain how they may be avoided as far as possible.

How would you calibrate the wire of a wire bridge?

3. Give Ampère's explanation of Oersted's experiment. Find the expression for the couple acting on a current circuit placed in a uniform magnetic field. Prove that the current flowing through a galvanometer of the suspended coil type is proportional to $\theta \sec \theta$ where θ is the deflection produced. Give the approximate theory for a suspended coil ballistic galvanometer. State how a correction may be applied to eliminate the effect produced by damping.

4. Define the Peltier effect and explain how Lord Kelvin was led to the discovery of another reversible heating effect. Explain what is meant by the "Specific heat of electricity" in a metal.

How would you employ the experimental formula

$$E = a(T - T_0) + b(T^2 - T_0^2)$$

to obtain a thermoelectric diagram for any two metal wires? Show how to obtain from a thermoelectric diagram the E.M.F. for any two junction temperatures.

Describe the ordinary thermoelectric pyrometer, and criticise its use for the accurate measurement of temperature.

5. What is meant by the inductance of a circuit? Find the dimensions of inductance on the ordinary c.g.s. electromagnetic system of units.

Describe Lord Rayleigh's method for the measurement of self inductance.

A solenoid of length 100 cm. and mean radius $2\frac{1}{2}$ cm. is wound with 10 turns per centimetre of length. Calculate the inductance of the solenoid.

6. A simple harmonic electromotive force $E \sin \omega t$ acts on a circuit of resistance R and inductance L ; find the expression for the current at any instant. Find also the average activity in the circuit, and prove that if P be this mean activity, the activity at any instant is given

by $P - \frac{P}{\cos \theta} \cos (2\omega t - \theta)$, where θ is the angle of lag.

C.—IN AGRICULTURE.

FIRST EXAMINATION.

MATHEMATICS—See pp. 544—548.

NATURAL PHILOSOPHY—See pp. 548—553.

CHEMISTRY—See p. 553.

BOTANY—See p. 644.

ZOOLOGY—See p. 645.

FINAL EXAMINATION.

AGRICULTURE AND RURAL ECONOMY.

THREE HOURS.

(ALL questions to be answered.)

1. Explain the principles on which the practices of ensilage and hay-making are based. Contrast the effects produced on a crop of ryegrass and clover, and compare the economy of the processes.

2. State which are the chief draught horse breeds kept in Britain, and compare two of them.

3. Give a prescription of artificial manures suitable for the oat crop on poor land, and give an approximate estimate of the cost of the manuring and of the amount and value of the increase it should produce. State the specific effects produced on the crop by each of the constituents of the manure applied.

4. How much seed would be required per acre for each of the following crops under the conditions stated :

(a) Wheat, variety Square-head, sown in September and December, on similar land, broadcasted by hand, and drilled ;

(b) Oats, Storm King and Potato, sown 1st April, broadcasted and drilled ;

(c) Potatoes, whole passing through $1\frac{1}{2}$ inch and remaining on $1\frac{1}{4}$ inch ;

Potatoes, whole passing through 2 inch and remaining on $1\frac{1}{2}$ inch ;

Potatoes, as grown with large removed, and dressed over $1\frac{1}{4}$ inch riddle, but the tubers cut to one and two eyes ;

(d) Mangold, Yellow turnips, Swedes, and Carrot ?

5. You have two cows in full milk, one yielding 2 gallons of milk daily, with 5 per cent. of fat, and another yielding 3 gallons of milk having 3 per cent. of fat. If the milk of both is made into butter or cheese, how much of each may each cow be expected to produce per week ?

6. What effect would the following foods have on the flesh of a pig to which they were fed, which in addition received a considerable quantity of separated milk, Indian Meal, Paisley Meal, Pease ground, and Oats ground ?

AGRICULTURAL CHEMISTRY—THREE HOURS.

1. Give some account of the composition of basic slag and of its value as a manure. Why is it necessary that it should be finely ground? What other phosphatic manures are in use, and in what circumstances is each to be preferred?
2. Name the principal carbohydrates which are found in plants, and show how they are related chemically. Explain the term hydrolysis, and give examples of cases which occur in animals and plants.
3. How would you proceed to analyse a sample of oil cake? State precisely the meaning and value of each of the determinations usually made. Compare the composition of linseed and cottonseed cakes.
4. Name the impurities which would render a water unsuitable for dairy purposes, and show how the presence of each can be detected. What are the causes of hardness in water, and by what methods can hard water be softened?
5. Define the term caloric. What are the approximate calorific values of carbohydrates, albuminoids, and fats respectively (*a*) as determined in a calorimeter, and (*b*) when oxidised in an animal? Are the food values of these substances measured by their calorific values?
6. Give an account of the states in which water exists in the soil. What is the water-holding power of a soil, and on what does it depend? State approximately the amounts of water which typical soils of different kinds are capable of holding.

VETERINARY HYGIENE—THREE HOURS.

(Six questions only to be attempted.)

1. Enumerate, in their position from above downwards, the bones of the hind limb of the horse. State how they are attached to the pelvis as compared with the attachment of the fore limb to the body.
2. Describe the lungs, and state what you know of the circulation of the blood and function of respiration.
3. How would you distinguish between venous and arterial bleeding, and by what means would you arrest each form?
4. What first aid would you employ in a case of wound of the abdomen with protrusion of bowel?
5. What is Hoven? State its causes and treatment.
6. State where Bone Spavin, Splint, Curb, Ringbone, and Sidebone respectively occur.
7. Give the symptoms of Cow-pox. What is its treatment? What preventive measures would you adopt to prevent its spread? With what conditions in the human being is it allied?
8. Compare oats, barley, wheat, and maize as articles of diet of the horse. Give the quantities you would allow per animal per day.

AGRICULTURAL BOTANY—THREE HOURS.

1. Discuss the circumstances which may determine an epidemic attack of fungal disease.

2. Give a full and detailed account, with drawings, of the structure of a Grass-leaf, and indicate some of the modifications which occur in different types of Grasses.

3. Explain fully the way to conduct culture experiments, with a view to demonstrating the importance of various constituents of plant-food. What is the effect of absence of Iron, of Silicon, and of Potassium respectively?

4. Give a full account of the mode of life, and harmful effect of *Nectria cinnabarina*.

5. Describe in detail the Yellow Rattle (*Rhinanthus*), and explain why it is an undesirable plant in grass-land.

AGRICULTURAL ENTOMOLOGY—THREE HOURS.

1. What do you understand by the term "chitinous cuticle"? Where does the chitinous cuticle occur, and what are its functions in insects? State also its fate during ecdysis.

2. Show with examples the various ways in which harm may be caused by insects, parasitic on (a) plants, (b) animals.

3. What is the nature of the damage produced by mealy bugs, or scale insects? Mention important examples, and give the life history of one of them.

4. Give a general description of Aphides and indicate the remedial measures to be usually recommended.

5. Indicate the life history of the cabbage root fly, and state how you would attempt to remedy and to prevent an attack.

6. Mention the insects which may damage the turnip crop, and with reference to one of these give the life history, and state how it could be suppressed or eradicated.

7. Give a general description of mange, and discuss particularly the efforts now being made to suppress sheep scab.

GEOLOGY AND MINERALOGY—See pp. 608, 609.

AGRICULTURAL ENGINEERING—TWO HOURS.

(Not more than SEVEN questions are to be attempted.)

1. A lifting crab has a rope barrel 8" in diameter and a handle with a lever 10" in length. The pinion on the handle shaft has 20 teeth and the wheel 120 teeth. Sketch the crab; and, neglecting friction, determine, by the principle of moments, the pressure between the teeth of the wheel and pinion and the load raised when a uniform effort of 30 lbs. is exerted on the handle.

2. State and explain the geometrical condition which must be satisfied in order that two pulleys connected together by a flat belt may work properly.

It is required to transmit motion by means of a flat belt from one shaft to another at right angles to but not intersecting the first. Show, by the aid of sketches, how the pulleys should be arranged for a given direction of motion; and explain how the motion could be rendered reversible by means of guide pulleys.

3. Describe, with the aid of sketches, the construction and working of a centrifugal pump.

A centrifugal pump driven by an electrical motor delivers 200 gallons per minute against a total head of 75 feet. Assuming the efficiency of the motor to be 85%, and the current required to drive it, 30 amperes at 250 volts, determine the efficiency of the pump.

4. Explain how the current generated in the armature of a direct-current dynamo is rendered continuous in the outside circuit.

Explain two methods of exciting the field magnets and discuss the advantages and disadvantages of each.

5. With respect to the flow of water through pipes and channels, define the terms: "pressure head," "velocity head," "virtual slope" and "hydraulic mean depth."

Explain the formula $h = f \frac{v^2}{2g} \cdot \frac{4l}{d}$, and apply it, assuming $f = .0075$, to calculate the flow, in gallons per hour, through a 24" pipe, two miles in length, connecting two reservoirs in which the difference of free surface levels is 15 feet.

6. Describe, with the aid of sketches, the construction of any one form of vertical boiler, and the apparatus usually employed for ascertaining: (a) the water level; (b) the steam pressure.

If the steam generated per lb. of coal burned were equivalent to 7.5 lbs. estimated from and at 212° F., and the calorific value of the fuel 13,500 Fahrenheit heat units, what would be the percentage of the available heat utilized in the process?

7. Sketch and describe a circulating water system suitable for keeping the cylinder of a small gas or oil engine cool.

About what percentage of the total available heat of the combustible used is carried away by the cooling water? and what becomes of the remainder?

8. Describe any one form of spring-tine cultivator with which you are familiar; explaining, with the aid of sketches, the construction and action of the mechanism for applying the pressure and for raising the sections.

9. Describe, briefly, a grain drill having a force feed arrangement, explaining, with the aid of sketches, the details of the feed arrangement and the mode of varying the rate of feed.

10. Explain, with the aid of sketches, the mechanism by means of which the motion of the drive wheels is communicated to the knife of a mowing machine, and describe the construction of the cutter bar, naming the various parts and the materials of which they are made.

D.—IN PUBLIC HEALTH.

FIRST EXAMINATION.

PUBLIC HEALTH LABORATORY WORK—Two Hours.

(Four questions only to be answered, of which No. 5 must be one.)

1. What is meant by Plumbo-solvency as applied to potable waters? Discuss its causation. How may it be experimentally estimated by laboratory methods? How may it be prevented?

2. From the amount of Chlorine found in a water, what are the indications as to its purity or impurity? What are the sources of Chlorine in waters? In what classes of waters are relatively large amounts found?

3. Describe the principles of the processes commonly in use for the estimation of "Organic Matter" in Air. Discuss (1) the suitability of the processes, and (2) the value of the results obtained therefrom as true indices of impurity of Air. What is the composition of "Organic Matter" in Air?

4. Indicate some reasons which would demand the filtration of the water-supply of a populous place. What methods are employed? What results may be anticipated therefrom? Suggest a method by which peaty colouring matter in solution in a water may be got rid of.

5. What will be the probable effects on consumers of milk and other food-stuffs contaminated with *B. Coli Communis*? Discuss the likely sources of the organism therein. How would you prove the presence of the organism in the food-stuff?

GEOLOGY—See p. 608.

IV.—FOR DIPLOMA IN EDUCATION.

GENERAL PAPER—THREE HOURS.

(Only FIVE questions to be answered, ONE of which must be Question 1.)

1. "The classification should be such as to afford due opportunity for promotion, and promotion in one subject, *e.g.*, Reading should not be made dependent on proficiency in another, *e.g.*, Arithmetic." Critically examine this statement, showing how its acceptance would affect the Time-Table and general classification of an elementary school.

2. "The more difficult books should be selected for the class reading; the more easy and attractive for the home reading—poetry and prose being chosen in fair proportion." Discuss this proposition, and in illustration of your conclusion outline a one year's course of reading for a supplementary class.

3. "The words 'multiply' and 'divide' might have been invented on purpose to create confusion in passing from integral to fractional arithmetic." Critically examine this statement, and in support of your conclusion clearly illustrate how you would introduce a class to the study of these two operations.

4. Assuming the 'culture-epoch' theory, discuss present methods and materials of instruction in the first two years of the child's school-life.

5. Estimate the place and value of manual training in the elementary school course.

6. "The old studies are now taught with a different aim and in a new way." Discuss this with special reference to (a) Reading, (b) History, (c) Physical Training, fully illustrating your answer.

7. "The grammar of a language, considered as an isolated fact and not as a term in a process, is a thing of small intrinsic significance." Examine this statement, and in terms of your conclusion show the place and importance of this subject in the Elementary School.

8. "Formal knowledge stands first in our common school course, and real studies are allowed to pick up such crumbs of comfort as may chance to fall." To what extent is this true to-day, and what would you propose as an improvement on existing conditions?

TEACHING IN SECONDARY SCHOOLS.

CLASSICS—THREE HOURS.

(Only FIVE questions to be answered.)

1. "One of the chief aims of Latin teaching is to present clearly and forcibly the great principles underlying all expression of thought by speech." Discuss, expand, and illustrate.

2. To what extent (if any) would you use the 'direct' method in teaching Latin and Greek. Illustrate your answer, showing clearly the main advantages (or disadvantages) of the system.

3. What do you regard as the place and value of Latin versification, and to what extent (if any) would you advocate its use at the high school stage?

4. Discuss the value of the so-called 'Inductive' method of teaching Latin, examining with especial care the claim that it, more than any other method, stimulates the pupil's observational and reflective powers.

5. Critically examine the statement that "an examination set on prescribed work is *quantitative* whereas an examination on a passage set for translation at sight is *qualitative*." What proportion of the time would you devote to reading at sight in the last year of a high school course?

6. Outline the method of teaching Latin Composition which you consider best, illustrating your answer by explicit reference to one or two crucial instances of difference between the Latin and the English idiom.

7. What use of the 'comparative' method would you make in a first lesson on the verb *elui*?

FRENCH AND GERMAN—THREE HOURS.

(Only FIVE questions to be attempted.)

1. Outline the general rules you would keep before you in your choice of reading materials, giving your reasons in each case.
2. "The main object in learning other languages is to get a correct knowledge of one's own." Critically examine this statement, showing what effect its acceptance would have on your methods of teaching.
3. What do you regard as the most suitable materials for first lessons in conversation, and what proportion of the time would you devote to conversation in (a) an elementary, (b) an advanced class?
4. To what extent and for what main purpose would you use the following in the teaching of French?
 - (a) Writing to dictation.
 - (b) Reading in unison.
 - (c) Re-narration.
5. "Theoretical grammar ought not to be taken up too early, and when it is taken up it is not well to do it in such a way that the pupil is given ready-made paradigms and rules." Discuss this statement with reference to the teaching of German, fully illustrating your answer.
6. What do you regard as the special value of phonetics in the teaching of French? Illustrate your answer.
7. State and illustrate a few of the main features of the analytical-inductive method of teaching French and German.

 ENGLISH AND HISTORY—THREE HOURS.
(Only FIVE questions to be answered, FOUR of which must be taken from the same section.)

A.

1. A class has had a course of reading in Anglo-Saxon prose. Outline the preliminary directions you would give in introducing them to the study of the *Beowulf*.
2. In introducing a class to the study of Chaucer's *Prologue* what use would you make of the facts of contemporary history?
3. "Some of the epics, myths, and historical episodes are told both in prose and verse. The children may well meet and study them in both forms." What advantages (if any) would accrue from this method?
4. What do you regard as the place and value of paraphrasing with reference to (a) a passage from Chaucer, (b) a sonnet of Shakespeare, (c) a paragraph of modern prose? Illustrate your answer from any one of these.
5. Outline your method of reading a play of Shakespeare with an advanced class, clearly indicating at what stage you would take up such questions as analysis of plot, characterisation, etc.

B.

1. "The value of history is increased if it is looked upon in part as a laboratory science, in which pupils learn to assemble material and from it to make generalisations." Discuss and illustrate this statement.

2. "Poetry gives life and reality to history." Explain and illustrate this theory showing how its acceptance would affect (a) your method of teaching, (b) your choice of subject-matter.

3. How far do you agree with Herbert Spencer's theory that history for purposes of education is synonymous with sociology?

4. Explain and exemplify what is meant by the 'comparative' method of teaching history. To what extent would you use it?

5. To what extent is it possible in the study of history in the high school to lead the pupils back to original sources? Illustrate your answer.

MATHEMATICS AND SCIENCE—THREE HOURS.

(Candidates for Distinction in BOTH Departments must attempt THREE questions in EACH Section. Those taking only ONE Department must attempt FIVE questions, AT LEAST FOUR being taken from A or from B according as the Candidate professes Mathematics or Science.)

A.

1. Discuss, from the disciplinary point of view, (a) the value, (b) the limitations, of the 'concrete' in the teaching of elementary geometry. Fully illustrate your answer.

2. Sketch a first lesson in curve-tracing for a junior class.

3. Discuss the feasibility of taking solid geometry side by side with plane geometry instead of taking it up after a course in plane geometry has been completed. What are the main advantages (or disadvantages) of the latter method?

4. Discuss the advisability of approaching the study of Ratio and Proportion by (a) the Euclidean, (b) the purely algebraic method. Which (if either) method would you use, and why?

5. "Algebra is only written geometry—geometry merely pictured algebra." Critically examine this statement with special reference to the introduction of graphs in elementary algebra, carefully illustrating your answer.

6. "The mensuration of the common surfaces and solids should never be a matter of arbitrary rule." Discuss this proposition, and, by means of a few illustrative examples, show what method you would adopt in the teaching of this part of your subject.

B.

1. Discuss, with illustrative examples, (a) the value, (b) the limitations, of the 'heuristic' method of teaching science.

2. How would you explain to a class the action of the differential pulley? What points do you consider likely to present the greatest difficulty to the pupils?

3. Outline, as for an advanced class, the explanation you would give of the propulsion of an electric tramcar. What points would you require especially to emphasise, and what are the main misconceptions you would expect to find?

4. Indicate briefly how you would demonstrate to a senior class the method of determining the centre of gravity of a body (a) experimentally, (b) graphically, (c) by calculation. On which of these methods would you chiefly rely, and for what reason?

5. In the teaching of Chemistry, to what extent would you make use of (a) individual experimental work, (b) co-operative experimental work, (c) lecture demonstration, (d) formal lectures? At what stage does each of these methods attain its maximum importance?

6. Discuss the value of imagination in Science study with special reference to (a) Geology, or (b) Botany.

V.—FOR DEGREES IN MEDICINE AND SURGERY.

I.—PRELIMINARY EXAMINATION.

ENGLISH—THREE HOURS.

(EIGHT, and not more than EIGHT, questions are to be answered. 1 and 2 must be answered, with either 3 or 4, and either 5 or 6. The remaining FOUR may be any questions not already answered.)

1. Write an essay, of from two or three pages, on one of the following subjects:

- (1) The main outline of a novel by Scott or Dickens.
- (2) The future of India.
- (3) The best way of seeing the country.

2. Paraphrase:

Many are the sayings of the wise,
In ancient and in modern books enroll'd,
Extolling patience as the truest fortitude;
And to the bearing well of all calamities,
All chances incident to man's frail life,
Consolatories writ
With studied argument and much persuasion sought,
Lenient of grief and anxious thought:
But with the afflicted in his pangs their sound
Little prevails, or rather seems a tune
Harsh, and of dissonant mood from his complaint:
Unless he feel within
Some source of consolation from above,
Secret refreshings, that repair his strength,
And fainting spirits uphold.

3. Give some account of any *three* of the following : Edmund Ironside, Lanfranc, the Duke of Rothesay, Edward IV., Sir Philip Sidney, Strafford, Shaftesbury, Bolingbroke, Washington, Clive.

4. Write briefly about *three* of the following : Alfred and the Danes, Henry II. and Becket, Edward II. and his Barons, Henry V.'s war against France, Claimants to the throne of England between 1547 and 1558, Cromwell's battles, the Dutch wars with England, the Conquest of Canada, the Peninsular War.

5. What and where are : Helsingfors, Apia, Port Moresby, Napier, Pernambuco, Port-au-Prince, Anticosti Island, Walfisch Bay, Tiflis?

6. Name the principal islands in the West Indies, giving their form of government and capital towns.

7. Rewrite, so as to correct and improve them, the following sentences, giving reasons for any changes you may make :

(a) This hotel comprises 300 saloons and rooms, with varying get-up and spaciousness so as to agree both with the most pretentious taste of the ones and parsimony of the others.

(b) Children in the East have their own pet elephants, and the creatures enjoy a frolic with them as well as they do themselves.

(c) This world with all its trials is the furnace through which the soul must pass and be developed before it is ripe for the next world.

(d) Therefore we state that a person is only responsible for the amount of shares they take, and, once paid for, all further responsibilities cease; and whatever profits made will be divided among the shareholders.

8. Write a *general* analysis of the following passage and parse the words in italics :

The common hunt, *though* from their rage *restrained*
By sovereign power, her company disdained,
Grinned as they passed, and with a glaring eye
Gave gloomy signs of secret enmity.
'Tis true she bounded *by* and tripped so light,
They had not time *to take* a steady sight ;
For truth has such a face and *such* a mien
As to be loved *needs* only to be seen.

9. Give examples of short sentences containing severally the verbs *made*, *was appointed*, *lent*. Add notes on the various constructions required with these verbs.

10. Give the derivation of any *six* of the following words : nickname, alchemist, schooner, telephone, alms, squire, dwindle, witness, pain, sovereign, rusticate, mystery.

11. Write a short note on any *three* of the following : *The Taming of the Shrew*, *Comus*, *Macflecknoe*, *The Tale of a Tub*, *Windsor Forest*, *The Seasons*, *Sentimental Journey*, *The Deserted Village*, *Christabel*, *Mazeppa*, *Ulysses*, *Pippa Passes*.

12. Write notes on : To bluff, Free-fooder, bucket-shop, Chauvinist, black-leg, The Jolly Roger, to fake, a passive-Resister, log-rolling.

LATIN—See p. 508.

GREEK—See p. 511.

MATHEMATICS—See p. 514.

FRENCH—THREE HOURS.

I.

1. Translate into French :

That night Mary could not sleep ; for joy sometimes banishes sleep as well as sorrow. Early in the morning she rose, and before any of the inhabitants of the castle were awake, she set off alone to visit her old house. On her way she met many old friends, amongst whom she easily recognised the faces of those who used to come to her garden-gate to receive a bunch of flowers. They all looked delighted to see her again, though some of them were so changed that she scarcely knew them. Near the gate of the garden, which she remembered so well, she saw the farmer and his wife, who came joyfully to meet her, and welcome her to her home.

2. (a) He dropped his umbrella in the street.

(b) What will become of you ?

(c) Make yourself at home.

(d) I made him read this letter.

(e) On hearing the news, he almost fainted.

II.

Translate into English :

(a) Ma position était affreuse ; je venais de voir mourir un homme, avec lequel je vivais depuis plusieurs années et qui avait été pour moi presque un père : en même temps j'avais perdu mon compagnon, mon camarade, mon ami que j'aimais tant, et qui, lui aussi, m'avait pris en si grande amitié, et cependant quand le jardinier me proposa de rester chez lui, un sentiment de confiance me raffermir le cœur. Tout n'était donc pas fini pour moi : la vie pouvait recommencer. Et ce qui me touchait, bien plus que le pain assuré dont on me parlait, c'était cet intérieur que je voyais si uni, cette vie de famille qu'on me promettait.

(b) Tout jeune homme, encore écolier, j'avais organisé dans ma famille une petite troupe d'acteurs et d'actrices de mon âge, et nos jours de congé se passaient à réciter devant nos parents des actes entiers de Racine, de Corneille et de Molière. Tous les rôles m'étaient bons ; je jouais tous les emplois : les rois, les amoureux, les valets, les pères nobles, rien n'effrayait mes dix-huit ans ; je ne suis même pas bien sûr de n'avoir pas, à l'imitation de l'antiquité, représenté çà et là quelque princesse tragique : elle parlait en vers, je ne lui en demandais pas davantage.

III.

1. Give the French for : Two thousand soldiers arrived at the castle yesterday ; The eleventh of August, 1870 (in full) ; The accident occurred at a quarter to seven.

2. Give *four* sentences in French, with English translation, each containing *one* of the following : *quiconque, dont, ce qui, quel que*.

3. Translate into French :

(a) I fear that he will come.

(b) I doubt whether he knows that.

- (c) Prevent him from going away.
- (d) Unless he comes, we are lost.
- (e) Although you say so, I do not believe it.
- (f) It is the youngest, who has carried off the prize.

4. Translate into French :

- (a) Why did you not tell them so, when you saw them yesterday ?
- (b) I have no more money ; please give me some.
- (c) Did they not salute each other, when they met ?

GERMAN—THREE HOURS.

(Candidates may use either English or German Script.)

I.

1. Translate into German :

(a) Spenser, the celebrated poet, one day gained admission to the house of Lord Sidney, to whom he was quite unknown, holding in his hand a copy of one of his poems. The copy was taken to his lordship, who was a great admirer of good poetry. He took it, read it, was struck with the beauty of the verses, and manifested the keenest interest at the discovery of so new and rare a genius. He eagerly read a few stanzas, and turning to his steward, said, "Give the author of these verses fifty pounds." He went on reading and still more struck with another stanza, exclaimed, "Double the sum." The astonished steward hesitated to execute his master's orders. Sidney continues reading ; his liberality increases with his admiration. "I will give two hundred," he said, and pushing the steward by his shoulder, he added, "quick ! quick ! at once ; for if I read more, I shall be tempted to give him my whole fortune."

- (b) 1. I should not like to do this.
- 2. He came running down stairs when I entered.
- 3. You will be allowed to go.
- 4. I am told that you speak German very well.
- 5. Come and see me to-morrow.

2. Translate into English :

(a) „Ist es nicht ein hübscher Junge, Käthchen," sagte der Herr M., „und hätte ich nicht ein großes Unrecht begangen, wenn ich ihn da draußen in der Hütte hätte liegen lassen?"

„Er ist schön wie ein Engel," gab die Haushälterin zur Antwort, und trocknete sich die Augen mit dem kattunen Taschentuch. „Ich stehe bei ihm Tauspate, und Jacob soll er heißen. Ich und kein anderer ziehe ihn auf, und—werde keinen so krassen Egoisten aus ihm machen, wie Sie einer sind," fügte sie hinzu, indem ihr streitbarer Charakter wieder

die Oberhand gewann. Schön so, sagte der Doktor, gut gelaunt; vor allem mache ihm ein gutes Mehlsüppchen und später ein Bett neben dem deinigen. Und dann können wir endlich zu Nacht essen und auf sein Wohl trinken. Das soll unsere Weihnachtsfeier sein, und, meiner Treu, seit lange habe ich mich nicht so frohen Herzens an die Tafel gesetzt.

(b) Über die Züge des jungen Mannes legte sich ein tiefer Schatten und seine Stimme klang in unterdrückter Bewegung, als er antwortete: „Ja, es war hohe Zeit! Man fühlt es ja selbst, wie man verwildert in solchen Umgebungen, und kann's doch nicht ändern. Ich hatte keine Wahl, wie ich mein Brot verdienen wollte, und leben mußte ich doch. Aber wer weiß, was aus mir geworden wäre, wenn Sie mir nicht rechtzeitig die Hand gereicht und mich emporgerissen hätten. Viele Worte habe ich freilich nicht gemacht mit meinem Danke. Sie wollen es ja nicht, aber ich hoffe, ihn dereinst abtragen zu können.“

„Schon gut,“ wehrte Sameck ab, „du wirst auf unserm Zuge Gelegenheit genug dazu haben. Nun weiß ich doch wenigstens, woher dein tolles Reiten stammt! Aber ich bestreite dir entschieden das Recht, dir schon hier in Kairo Hals und Beine zu brechen.“

II. GRAMMAR.

1. Give the 2nd sing. present, imperfect, and imperative of: *abhauen*, *genesen*, *voraussehen*, *verzeihen*, *sich verfahren*, *aufheben*.

2. Express in German words:

$$1\frac{1}{2}, 5\frac{2}{3}, 7\frac{3}{4}, 4 \times 30 = 120; 25 - 2 = 23; 108 \div 12 = 9.$$

3. Give six verbs (with English translation) after which the Infinitive without “zu” is used. Give one example for each verb.

4. Distinguish between:

die Leiter—*der Leiter*.
die Mark—*das Mark*.
verständlich—*verständlich*.
gebeten—*geboten*.
die Ansicht—*die Absicht*.
furchtbar—*furchtsam*.

5. Show by examples what cases are governed by the following prepositions: *wegen*, *um*, *nach*, *trotz*, *neben*, *bei*. Give also the English of your sentences.

SPANISH—THREE HOURS.

I. Translate into Spanish :

(a) Oriental travellers say that a Chinese gentleman thinks it beneath his dignity to manufacture his own witticisms. He appreciates wit, and he is fond of tea ; but would as soon grow his own tea as make his own jokes. When he goes into society he carries in his pocket a packet of prepared witticisms and repartees which he has purchased at the nearest joke-shop. When conversation flags, and he perceives an opportunity for saying something brilliant, he draws a humorous remark from the top of his package, and gravely hands it to his neighbour. The latter as gravely reads it, and, selecting from his bundle of repartees the one which is appropriate, returns it with a bow to the original joker. The two then solemnly smile in a courteous and undemonstrative way, and resume the conversation, feeling that they have acquitted themselves with conspicuous brilliancy.

(b) Acá echo menos de mis acostumbradas diversiones.

(c) Estoy en que él no vendrá hoy.

(d) Se echa de ver en eso la prudencia de vmd.

(e) El no tiene nada que ver con lo que yo digo.

II. Translate into English :

(a) Admiróse un portugués

De ver que en su tierna infancia

Todos los niños en Francia

Supiesen hablar frances

—Arte diabólica es—

Dijo torciendo el mostacho

—Que para hablar en gabacho

Un hidalgo en Portugal,

Llega á viejo y lo habla mal ;

Y aquí lo parla un muchacho.

III. Grammar :

(a) Write superlative absolute, and relative of the following adjectives : grande, bueno, bajo, alto.

(b) Write first person singular and third person plural of the present and preterite indicative and present subjunctive of the verbs, poner, saber, decir, and querer.

(c) Give the English equivalents for the following Spanish expressions : Caer en gracia ; dar en el blanco ; dar el pésame ; Estar en que ; echar menos.

II.—PROFESSIONAL EXAMINATIONS.

I.—FIRST PROFESSIONAL EXAMINATION.

BOTANY—TWO HOURS.

(Only FOUR of the questions are to be attempted for the FIRST PROFESSIONAL EXAMINATION. All FIVE are to be attempted for the FIRST B.Sc. EXAMINATION.)

1. Describe the structure of the leaf of a Dicotyledon as seen in transverse section. Give a detailed account of the mesophyll, and explain its physiological importance.

2. Describe, with illustrative examples, three different modifications in the vegetative parts of plants specially adapted for climbing, and explain how they act.

3. What do you understand by Heliotropism? Describe and explain as far as you can the heliotropic curvatures exhibited by a seedling exposed to a lateral lighting.

4. What is a Seed? Describe its origin, development, and its contents at the period of ripeness in an Angiosperm.

5. Give an account of the life of a Moss. Explain its mode of nourishment, and the methods of its propagation.

ZOOLOGY.

(For Medicine—Two Hours; for Arts and Science—Three Hours.)

(Candidates in MEDICINE are only expected to attempt FOUR (not more) questions in SECTION A. Candidates in SCIENCE and in ARTS are expected to attempt FOUR questions in SECTION A and also the TWO in SECTION B.)

A.

1. Write a short account of *Aleyonium*. In what respects does it differ in structure from a typical sea-anemone?

2. What is meant by a *coelomic* body cavity? Describe the coelom in (1) *Lumbricus*, (2) *Hirudo*, (3) *Astacus*.

3. Describe shortly any cases known to you in which insects serve to spread blood parasites from one host to another.

4. Describe the process of "maturation" in the gamete of any metazoon and mention any case of a similar process occurring in a Protozoon.

5. Describe the general features—(1) of a spinal nerve and (2) of the heart—in *Scyllium*.

6. Write a description of the structure of a nematode worm.

B.

7. Describe shortly the structural arrangements in a Bee whereby it (1) walks up a smooth surface, (2) cleans its antennae and (3) stings.

8. What is meant by the term Mimicry? Discuss the question of its evolution through Natural Selection.

PHYSICS—Two Hours.

(N.B.—Not more than FOUR of the following questions to be attempted.)

1. Define work, energy, and rate of working. Define a dyne, an erg, and a horse-power.

A man weighs 80 kilogrammes, takes steps 60 centimetres in length, and raises and lowers his body 5 centimetres at each step. He walks 5 kilometres on the level, in an hour; find the whole work done by him in *raising* his body against gravity, and the average rate at which he works in so doing.

2. Define the *freezing point* and *boiling point* and 42° C. on a mercury-in-glass thermometer.

A portion of water substance is taken in the form of ice at -10° C. and is raised to 120° C. while subjected to standard atmospheric pressure. Describe carefully the physical changes which the substance undergoes.

3. A boy eats an ice which weighs 50 grammes. Supposing that the freezing point and the latent and specific heats of the substance are the same as those of water, and that half of the substance was frozen, find in ergs the energy which was supplied to bring the substance to the temperature of the blood, 37° C. [Work equivalent of 1 calorie = 42,000,000 ergs.]

If the boy weighs 50 kilogrammes, how far would he have to walk upstairs to expend the same amount of energy?

4. State the laws of refraction, and explain briefly how they may be verified.

An observer views a short white vertical rod through a prism held in front of his eye with its edge horizontal. Describe, and illustrate by a careful diagram, the appearance presented by the image.

5. Show how a real image of an extended object, for example an arrow, is formed by a convex lens, illustrating by a careful drawing.

Describe the lens-system of the eye, and the mode in which images of distant and of near objects are formed on the retina. Describe also how the ordinary defects of eyesight arise, and how they are compensated by proper appliances.

6. Give the fundamental principles of the induction of a current by the motion of a circuit in a magnetic field.

By means of these principles explain the construction and action of an ordinary induction coil, such as that used to excite vacuum tubes, or to produce Röntgen rays.

CHEMISTRY—Two Hours.

(Only FOUR questions to be answered.)

1. State Avogadro's Law. 100 c.c. nitric oxide are mixed with the same volume of oxygen: what is the volume and composition of the resulting gaseous mixture and what would be the result of bringing it into contact with water?

2. Describe fully the method of preparing and collecting a sample of any one of the following gases: hydrochloric acid, or sulphuretted hydrogen, or nitrous oxide. State the properties of the gas chosen.

3. How is bismuth nitrate prepared from metallic bismuth and how is it converted into the basic nitrate? Give the formula of bismuth subnitrate.

4. Describe in detail the preparation of chloroform, giving the method of purification. What change takes place when chloroform is exposed to air and sunlight and how may this be prevented?

5. Give structural formulae for acetic acid, acetone, ether, and urea. State how urea has been prepared synthetically.

II.—SECOND PROFESSIONAL EXAMINATION.

ANATOMY—ONE HOUR AND A HALF.

1. Describe the distinguishing characters of the right and left lung, including the extent of apposition of each with parietal and cardiac parts.
 2. Describe the articular surfaces, the ligaments and the movements of the ankle joint.
 3. Describe the microscopic structure of the mucous membrane in the various parts of the interior of the nose.
 4. Describe the vascular and the nervous supply of the reproductive organs, genitalia and rectum.
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PHYSIOLOGY—Two HOURS.

(FOUR questions only to be attempted.)

1. Make a diagram to show the structures involved in bringing about a *voluntary* muscular contraction. What is meant by the term *fatigue*? Which of the structures in your diagram become fatigued first, and which is the most resistant to the effects of continuous exercise?
 2. Discuss how the various digestive glands interact upon one another, and describe how our knowledge of this interdependence has been arrived at.
 3. How may the intracardiac blood pressure be investigated? Make and explain a diagram to show the variations in the Auricular and Ventricular pressures throughout the Cardiac Cycle.
 4. In what combinations is the waste nitrogen of the body eliminated? Describe the chemical nature, and discuss the seat of formation of any two of these nitrogenous waste products.
 5. Describe and explain the influence of respiration on the arterial blood pressure.
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MATERIA MEDICA AND THERAPEUTICS—

Two HOURS.

1. Compare and contrast the action as emetics of *Apomorphine Hydrochloride*, *Tartar Emetic*, and *Zinc Sulphate*.
2. What changes are produced by *Alcohol* acting as a chronic poison, and to what symptoms do they give rise?
3. Classify *Anthelmintics* according to the parasites on which they act. What is the most suitable form for the administration of each?
4. State the effect of the following drugs when applied locally to the conjunctiva: *Castor Oil*, *Glycerin*, *Homatropine*, *Atropine*, *Cocaine*.
5. Discuss the action of *Nux Vomica* and of *Cinchona Bark* as tonics.

III.—THIRD PROFESSIONAL EXAMINATION.

PATHOLOGY—TWO HOURS.

(Only FOUR questions to be answered.)

1. Give an account of the varieties and the structure of thrombi. Mention the commoner sites of their occurrence and discuss the factors concerned in the production of thrombosis.

2. Describe the structural changes which may occur in the myocardium as a result of atheroma of the coronary arteries.

3. Describe the appearance of the tibia in a case of (a) acute, and (b) chronic osteomyelitis. Discuss the etiology of these conditions.

4. Give a description of the lesions produced in the human subject by the anthrax bacillus, contrasting them with those occurring in the ox. How is the disease spread, and what methods would you adopt in the diagnosis of a suspected case?

5. Describe the lesions which may occur in the brain and its membranes as the result of tertiary syphilis and state what secondary effects may be produced by these lesions.

MEDICAL JURISPRUDENCE—TWO HOURS.

(FOUR questions only to be answered, of which ONE must be the last.)

1. In making a *post-mortem* examination of a body on which a wound is found, state what points you would note to aid in determining whether (a) the wound had been inflicted before or after death; (b) it had been homicidal or suicidal; (c) it had been the cause of death.

2. Describe briefly Galton's and Bertillon's methods of identification of criminals, and compare their value.

3. An unmarried woman has given birth to a child, which is found dead on the following day. Infanticide is suspected, and the question of viability is likely to arise. State the facts which on *post-mortem* examination would lead you to report that intra-uterine life had lasted for (a) about five months, and (b) about seven months.

4. In a criminal prosecution (1) what is required as necessary to be proved in order that the accused person may be barred from sentence on the ground of insanity? (2) what would probably be the value of the following defences, if proved:—(a) that the accused was intoxicated at the time; (b) that he was suffering from *delirium tremens*; (c) that he was suffering from chronic mental disease due to alcoholism?

5. Give two examples of what are known as physiological antidotes of poisons. Discuss each example, stating how far you regard the antagonism as of real antidotal value.

6. State fully all the ways you know of in which chronic arsenical poisoning may unintentionally occur, and give the various symptoms. Describe in detail Marsh's process for the separation of arsenic from a clear solution, and give two tests for the separated arsenic.

PUBLIC HEALTH—Two Hours.

(FOUR questions only to be answered.)

1. Define the following terms:—*Crude Death-rate*; *Corrected Death-rate*; *Infantile Death-rate*; *Zymotic Death-rate*; *Case Mortality or Fatality rate*.

2. Describe two methods of room disinfection after diphtheria, and compare their value.

3. Describe one biological method of sewage purification, and one chemical method.

4. What evil effects may damp dwellings produce on health? In what several ways may dwellings become damp, and, in each case, how may the damp be prevented?

5. How may wells used for supplying drinking-water be classified? State in general terms the characters and degree of safe use of the water from each class.

6. State briefly the points you would note in preparing a leaflet on the means to be used for preventing the spread of tubercular phthisis from patients compelled to live in small houses with other inmates.

IV.—FINAL PROFESSIONAL EXAMINATION.

SURGERY—Two Hours.

(FIVE questions to be answered, including No. 1.)

1. Describe the histological phenomena connected with the healing of a wound of the soft parts.

2. Give the aetiology, clinical characters, pathology, and treatment of carbuncle.

3. What varieties of umbilical fistulae are there; how do they occur, and how should they be treated?

4. What are the symptoms, causes, and treatment of a perforating gastric ulcer?

5. What are the causes, symptoms, and treatment of a displaced semilunar cartilage of the knee joint?

6. Describe the preparations necessary for the performance of an aseptic operation.

PRACTICE OF MEDICINE—Two Hours AND A HALF.

(Only FOUR questions to be answered.)

1. Describe the pathology, symptoms, and treatment of a typical case of disseminated cerebro-spinal sclerosis.

2. Describe the different causes of coma, and how would you differentiate between them?

3. Give a succinct account of an attack of lobar pneumonia, its pathology, symptoms, and treatment.

4. Describe the pathology, course, and treatment of a case of interstitial nephritis.
5. Give an account of the symptoms, progress, and treatment of a case of rheumatic endocarditis.

OBSTETRICS AND GYNAECOLOGY—TWO HOURS.

OBSTETRICS.

1. State the varieties of Placenta Praevia, and give their differential diagnosis and treatment.
2. What are the causes of Prolapse of the Funis? Give the appropriate treatment of this condition.
3. A multipara, aged 30, was delivered of a healthy child on May 11th, 1905. The medical attendant (having performed a *post-mortem* examination the previous day) made no vaginal examination, but expelled the placenta by abdominal pressure. On May 14th the patient was seized with rigors; temperature, 103; pulse, 124; slight abdominal tenderness and somewhat offensive lochia. Discuss this case thoroughly, and give the treatment you would adopt.

GYNAECOLOGY.

1. State the differential diagnosis of uterine haemorrhage occurring after the menopause, and give the proper treatment.
2. Give the causes, diagnosis, complications, and treatment of prolapsus uteri.

VI.—FOR DEGREES IN LAW.

I.—PRELIMINARY EXAMINATION FOR B.L.

a.—ARTS AND SCIENCE PRELIMINARY.

(See pp. 505-528.)

b.—ARTS SUBJECTS.

(Same as Degree of M.A. See pp. 528-555.)

II.—LAW EXAMINATIONS FOR LL.B. AND B.L.

CIVIL LAW—THREE HOURS.

(Candidates are requested to answer only TEN of the following twelve questions.)

1. Give an account of the political organization of the *populus Romanus* prior to the time of Servius Tullius.
Describe the general character of the laws ascribed to the kings (*leges regiae*).

2. Describe the position and powers of the Praetor.

"It was by granting new remedies that the Praetors became a source of law."

Discuss and illustrate this statement.

3. Write brief notes on two of the following: *Jus Aelianum*; *Codex Theodosianus*; *Breviarium Alarici*.

4. State, and comment on, the Institutional definition of *jurisprudentia*.

Explain the origin and character of the *jus gentium*.

5. Compare the legal position of a wife in a marriage *cum manu* and in a marriage *sine manu* respectively.

State succinctly the essential conditions of a lawful marriage in the time of Justinian.

6. Describe the forms of (a) *adrogatio*, and (b) *adoptio*.

What special rules were applicable to the *adrogatio* of an *impubes*?

7. State the purport of the following enactments: *Lex Hortensia*; *Lex Cincia de donis*; *Lex Falcidia*.

8. What was essential to the acquisition of property by (a) *occupatio*, and (b) *specificatio*?

State the nature and incidents of a right of *emphyteusis*.

9. Give a short statement of the law relating to (a) *exhereditatio liberorum*, and (b) *substitutio pupillaris*.

10. In what ways might an *obligatio* be extinguished?

Distinguish *negotia stricti juris* and *negotia bonae fidei*.

11. Trace the steps by which the right in security, *hypotheca*, was developed.

State the Praetorian order of succession *ab intestato*, in the case of a free-born citizen.

12. Translate and comment on three of the following passages:

Nuda pactio obligationem non parit, sed parit exceptionem.

Hereditas est successio in universum jus quod defunctus habuit.

Itaque si pecuniae usus fructus legatus sit, ita datur legatorio ut ejus fiat, et legatorius satisdet heredi de tanta pecunia restituenda, si morietur aut capite minuetur.

Quodcumque ergo imperator per epistolam constituit, vel cognoscens decrevit, vel edicto praecepit, legem esse constat; hae sunt quae constitutiones appellantur.

(Candidates for DEGREES IN LAW are recommended, in addition, to answer TWO of the following questions.)

1. What was the general rule as to *periculum* in a contract of sale? Note briefly any exceptional cases.

2. Mention, and explain the effect of, the special agreements (*pacta adjecta*) usual in a contract of sale.

3. Translate, and comment on the following texts:

Inter patrem et filium contrahi emptio non potest, sed de rebus castrensibus potest.

Sine pretio nulla venditio est: non autem pretii numeratio, sed conventio perficit sine scriptis habitam emptionem.

LAW OF SCOTLAND—THREE HOURS.

(Candidates are not expected to attempt more than TEN of the following questions.)

1. How may marriage be constituted? State the rules of law relating to marriage by promise *subsequente copula*.
2. Describe *præpositura in rebus domesticis*. How may it come to an end?
3. A minor's estate has suffered enorm lesion. In what circumstances is restitution within the *quadriennium utile* refused?
4. In what cases may a judicial factor be appointed? With whom does the appointment lie?
5. What rights has a father in respect to the guardianship of his lawful pupil children (a) in his lifetime, (b) after his death?
6. Explain the rights of an agricultural tenant to remove fixtures, (a) at common law, (b) under the Agricultural Holdings Act, 1883.
7. What is constructive conversion? How may it affect the succession of the party bringing it about? (Avoid the law regarding Bonds.)
8. What securities must be valued and deducted in lodging a claim to vote in the election of a Trustee in a sequestration?
9. In what cases does a seller of goods impliedly warrant their fitness for a particular purpose? What warranties are implied in a sale by sample?
10. What events dissolve a firm *ipso facto*? How otherwise may a firm be dissolved?
11. State briefly the rules as to Appropriation of Payments.
12. Explain the present rules of Scots Law in regard to the *bona fide* possession of fruits.
13. Who may sue in their own right in respect of a fatal injury? What may they claim?
14. Explain the doctrine of Privilege in connection with liability for damages for slander. How does it affect statements made (1) by a witness giving evidence on oath; (2) by a witness in precognition; (3) by counsel during the conduct of a case; (4) in a newspaper report?
15. What remedies are open to an ordinary mercantile creditor for recovery of a debt due him? (Avoid details of procedure.)

CONVEYANCING—THREE HOURS.

(Not more than TWELVE questions to be attempted.)

1. Discuss with special reference to the law and history of Scottish Conveyancing the importance attached to Possession as a Test of Ownership.
2. Contrast the position of a Superior towards a Vassal with that of a Co-feuar towards such vassal in regard to the circumstances and ways

in which they may respectively obtain redress for violation by such vassal of the terms of his feu.

3. Describe briefly the ways in which limitations may be imposed on the exercise by the Owner of a heritable estate and his successors of full proprietary rights.

4. "As regards intimation, the Register (of Sasines) occupies the position of a universal debtor in regard to heritable rights . . . and with respect to possession performs the function of a universal expositor of the real right of ownership." Explain this statement.

5. Were feus of burgage lands competent before 1874? What difficulties have arisen in the interpretation of the Act of that year as to the recording of Writs relating to burgage subjects?

6. How far is it true to say that the principal changes introduced in the Law of Conveyancing in the last century consisted in the simplification of Forms?

7. In 1880, *A*, superior of certain lands, purchased the *dominium utile* thereof from *B*, who had paid a casualty on his entry in 1872. No further casualty was thereafter paid. *A* died without consolidating, predeceased by *B*. At date of sale, arrears of feu-duty were due by *B* to *A*, which were not deducted from the price. *A*'s trustees made up separate titles and conveyed the superiority to *X*, the *dominium utile* to *Y*. Did *X* thereby acquire any claims against *Y*?

8. In what circumstances did a General Service have effect with reference to property titles prior to 1874, and how was its usefulness extended by the Act of that year?

9. Describe briefly the rights, powers and privileges of the Creditor in a Bond and Disposition in Security in reference to the security subjects with the different circumstances in which they fall to be exercised.

10. *A* holds a recorded absolute Disposition of certain lands granted by *B*, who gets a Back Letter to the effect that the lands are held in security for all sums 'now due or which may become due' by *B* to *A*. *B* then for onerous considerations assigns his whole rights in the lands to *K*, *A* receiving intimation thereof. Thereafter *K* and *A* both make further advances to *B*. In a competition between *K* and *A*, state their respective interests in *B*'s lands.

11. Does a General Disposition *mortis causa* evacuate a prior special Destination

(a) where the Deeds are granted by the same party, the special destination being to himself and heirs-substitute; and

(b) where the Grantor of the General Disposition is the Institute under the still subsisting destination of an ancestor's estate?

12. *X*, infant in certain lands, bequeathed them by Trust Disposition and Settlement to the heirs of his body, whom failing to his nephews *Y* and *Z* and the survivor. He died childless, predeceased by *Y*. How does *Z* complete title? Would there have been any difference if a child of *X* had survived his father, but predeceased *Z* childless and intestate?

13. When a Trust lapses through all the Trustees predeceasing the Testator, what steps may be taken to provide for its administration, and how in such a case is title completed to heritage: (a) gifted to an individual by name and (b) directed to be held by the Trustees for certain life interests and then to fall into residue?

14. In a question as to the date of Vesting of the residue of an estate under a Will, what importance would you in general attach to the following factors:

- (1) Interposition of a liferent of the whole estate;
- (2) a survivorship clause in the residuary destination;
- (3) a 'destination-over' to the issue of the residuary legatees; and
- (4) gift of the residue to a class, capable of increase subsequent to the Testator's death?

15. "It would be a mistake to suppose that the abolition of the renewal of investiture and the institution of the implied entry have not in several instances materially altered the interests of Superiors and Vassals." Explain and illustrate.

PUBLIC INTERNATIONAL LAW—THREE HOURS.

(Omit FIVE questions. Reasons or reference to authority expected.)

1. Under what circumstances can recognition of independence be granted to a state, and what is the relation of a new state to the obligations of a state from which it has seceded?

2. What are the chief exceptions to the rule that the jurisdiction of a state is co-extensive with its territory?

3. Distinguish *protectorate* from *protected state* and *retorsion* from *reprisal*.

4. What are the provisions of the Hague Conference on International Commissions of Enquiry? Has any use been made of this method of settling international disputes?

5. Discuss the doctrine that war is an affair solely between the organised forces of one state and the organised forces of another state. Is it theoretically correct? Does it correspond completely or approximately with the particular usages of war?

6. Who may be made prisoners of war? What are the chief rules of international law with reference to their treatment?

7. What are the chief provisions of the Geneva Convention 1864? What provision has been made for extending the principles of that Convention to maritime warfare?

8. "The policy of the United States in 1793 constitutes an epoch in the development of the usages of neutrality." Explain this.

9. What is the right of visit and search? How is it exercised?

10. What is the doctrine of continuous voyages? How has it been extended to carriage of contraband? Do you regard the extension as justifiable?

11. Explain *commercial blockade*, *blockade by notoriety*, and *paper blockade*, and state shortly the existing law applicable to them.

12. A capture having occurred through an illegal use of neutral territory, how and at whose instance may restitution be effected?

13. "Custom and inherent difference between *land* and *marine warfare* have rendered the conditions (of admission of belligerent forces on neutral territory) unlike in the two cases." Explain.

INTERNATIONAL PRIVATE LAW—THREE HOURS.

(Omit FOUR questions. Reference to principle or authority is expected.)

1. "The term Private International Law is wrongly formed, inelegant, and inconvenient" (Zitelmann). Explain. Is Comity a suitable substitute for that term?

2. Explain what is meant by the Statute Theory.

3. How is the capacity of a Corporation determined?

4. A child is born in England as the result of illicit intercourse in England between a domiciled Scotsman and a domiciled Englishwoman. The parents are subsequently married in England. Is the child capable of inheriting, (1) Scots heritage, (2) Scots moveables, (3) English realty, (4) English personalty?

5. A domiciled Frenchman becomes naturalised in Britain, acquires an American domicile and dies in Prussia having executed a will in Italy. With what law or laws must his will comply, in point of form, to be valid in Scotland?

6. A policy of life insurance effected in Scotland with a Scots Company is assigned in England. What law will the Scots apply in determining the validity of the Assignment? State the principle.

7. What are the local laws which might be applied to the Contract relation, and show the objection to the *exclusive* application of any three of them?

8. *K*, a foreign sovereign, is living incognito in Scotland under the name of *S*. Whilst in Scotland and passing as a British subject he makes a promise of marriage to *A*, a Scotchwoman, who has no knowledge that *K* is a foreign subject. *A* brings an action against *K* for breach of promise. *Quid juris?*

9. A collision occurs in Belgian territorial waters between a Glasgow ship and a Spanish one. On the assumption (*a*) that the collision was due to the act of the Belgian pilot of the Glasgow ship, whom the shipowner was obliged to employ and in whose selection he had no choice, and (*b*) that by the law of Belgium there is a liability for damages arising from a collision in such circumstances, can the owners of the Spanish ship bring an action for damages in the Scotch Courts? Explain the principle.

10. (*a*) The holder of a British Patent for forced-draught applies to the Court of Session for an interdict against the master of a foreign

vessel lying in the Clyde on the ground that the forced-draught apparatus on that vessel infringes his British Patent. Is he entitled to succeed?

(b) Can the foreign owner of a trade-mark registered here claim damages in this country against a British subject who applies that mark to goods that were manufactured and sold abroad?

11. Under what circumstances will recognition be given in British Courts to foreign judgments? *Quid juris*, if the judgment is obtained in an action instituted after arrestment to found jurisdiction.

12. Give a brief report of any two of the following cases:—Brooks' Trustees, *in re* Bethell, *Sottomayor v. de Barros*, *Lemesurier*, *Hamlyn v. Talisker Distillery Coy.*

JURISPRUDENCE.—THREE HOURS.

(TEN questions and no more to be answered.)

1. What is meant by Equity? Compare English and Roman Equity as regards their sources, their authors, and the principles on which they were based.

2. "All property is founded on adverse possession ripened by prescription." Explain this statement. How far does it agree with Maine's view of the origin of property?

3. What is meant by the *Jus Gentium*, and what is its connection in Roman Law with the *Jus Naturale*?

4. How does Maine account for the growth of the idea of territorial sovereignty?

5. Give a short sketch of the evolution of the idea of Contract on Maine's principles.

6. "The truths of jurisprudence stand in the same relation to law as that in which the truths of mathematics stand to, say, watch-making." How far do you consider this statement true? Give reasons for your view.

7. What is the value of the distinction between Public and Private Law? How do you account for Austin's treatment of this division of law?

8. Explain Holland's classification of persons into normal and abnormal, giving the principal classes and sub-classes into which he distinguishes abnormal persons, and pointing out how this classification affects the order of his exposition of legal principles.

9. "A legal right is a man's capacity of controlling with the assent and assistance of the State the actions of others. That which gives validity to a legal right is in every case the force which is lent to it by the State." Examine this statement.

10. Explain what Bentham means by "Dispositive Facts," giving and shortly explaining the nature of the different classes according to Holland. To what division of rights do these facts correspond?

FOR STUDENTS OF SESSIONS PRIOR TO 1905-6 ONLY.

11. "Law has for centuries been described as a command, but this description, though essentially true, is inadequate to the extent of being misleading." Explain and examine this statement.

12. Explain the notions of crime and punishment and discuss their relations to delict and compensation.

13. Discuss briefly the relation of law to morality.

FOR STUDENTS OF SESSION 1905-6 ONLY.

14. Explain Kant's view of the relation of law to ethics.

15. What does Kant mean by "Equity" and "the Right of Necessity," and how does he explain the difficulties in the conception of right to which they give rise?

16. What does Kant mean by *possessio phenomenon* and *possessio noumenon*? How does he seek to establish the possibility of the latter, and what is its relationship to private ownership?

CONSTITUTIONAL LAW AND HISTORY—

THREE HOURS.

(Omit two questions in each part.)

PART I.

1. What was the constitution of the Witenagemot? Describe its powers.

2. Define 'Common Law.' What were the courts of Common Law in the reign of Henry III.? What were their chief rivals?

3. Write an account of "the crisis of 1297," showing clearly its constitutional importance.

4. "Privilege of speech is granted, but you must know what privilege ye have; not to speak every one what he listeth, or what cometh into his brain to utter; your privilege is Aye or No." How far was this a correct statement of the law as it stood in 1593?

5. "The period of personal government during which Charles I. governed without the Parliament was, constitutionally speaking, as much a revolutionary period as that during which, later on, Parliament governed without the King." Expand this statement, explaining clearly the methods adopted by Charles I.

6. What statutes (*a*) against Roman Catholics, (*b*) against Protestant Non-Conformists were passed in the reign of Charles II.?

7. In what ways was the King precluded from the use of force, the misapplication of public money, and the perversion of law between 1688 and 1701?

PART II.

8. What do you understand by the Royal Prerogative? Explain the statement that "the survival of the Prerogative immensely increases the authority of the House of Commons."

9. Explain accurately "Cabinet Government," "Parliamentary Government," and "Party Government." How are they related to one another?

10. Describe the county franchise in England and Scotland respectively (a) prior to 1832, (b) at the present day.

11. What is meant by the "liberty of the Press"? Compare the position of the Press to-day with its position in England in the seveneenth century.

12. Under what circumstances did (a) the House of Lords, (b) the House of Commons assert a right to act as a court of first instance? Was the claim a valid one?

13. What are the provisions in force for ensuring that moneys voted by Parliament are devoted to the purposes for which they are voted?

14. Write short notes on (a) *Bushell's Case*; (b) *Ashby v. White*; (c) *Entick v. Carrington*.

MERCANTILE LAW—THREE HOURS.

(Candidates are not expected to attempt more than TEN of the following questions.)

1. What is the distinction between a real contract and a consensual contract? Give examples of each. What, generally, are the essentials of a contract?

2. What views may be taken by the Court of a claim for differences arising out of the purchase or sale of stocks on the Stock Exchange?

3. What are the essentials of a bill of exchange? In what respects does a cheque differ from a bill of exchange?

4. How may notour bankruptcy be constituted? Once constituted, how long does it endure?

5. What is the effect of an ordinary Trust Deed on preferences secured or attempted to be secured by individual creditors? What effect on a trust deed has a supervening sequestration?

6. In what respects does *Cessio bonorum* differ from sequestration?

7. State briefly the steps necessary to the formation of a limited company (a) when the capital is subscribed privately, (b) when appeal is made to the public for subscription. What *must* be stated in the Memorandum of Association?

8. What is the List of Contributories? Who makes it up, and how? What remedy has one whose name wrongly appears on it?

9. What statutory restrictions are imposed in regard to the allotment of shares of a company offered to the public for subscription?

10. Is a person in receipt of part of the profits of a business necessarily a partner in the business? What statutory provisions have been made in this respect?

11. Explain the terms: *Right of Lien*, *Right of Retention*, *General Lien*, *Special Lien*.

12. Describe generally the powers of the Court under the Money-Lenders Act, 1900.

13. Explain the terms: *Freight, Dead Freight, Demurrage, General Average, Particular Average.*

FORENSIC MEDICINE—TWO HOURS.

(*Not more than FOUR questions to be attempted.*)

1. What is the law regarding the practice of medicine and surgery in this country? What does the law require of a medical practitioner in the performance of his duty? What is malpraxis, and by what criteria is it determined by the law?

2. What evidences from the post-mortem dissection of a body would justify a medical examiner in giving an opinion that death had been due to starvation from want of food? What points in the report of such a case would you scrutinise especially in order to defend one charged with the crime?

3. What is meant by death by Coma? What are the common causes of Coma in cases associated with criminal charges, and what the post-mortem appearances found?

4. How may the power to make a Will be destroyed or weakened? What circumstances relative to the testator determine in law the validity or invalidity of a Will? What lines of evidence would you pursue in an action for reduction?

5. What is the law regarding the wilful administration of poison? What are the evidences of *irritant* poisoning (a) in the living body, and (b) in the dead body?

VII.—FOR DEGREE OF B.D.

I.—FIRST DEPARTMENT.

HEBREW.

FIRST PAPER—THREE HOURS.

I. Point and translate the following:

שמעו דבר יהוה בית יעקב וכל משפחות בית ישראל:
 כה אמר יהוה מה מצאו אבותיכם בי עול כי רחקו מעלי
 וילכו אחרי ההבל ויהבלו: ולא אמרו איה יהוה המעלה
 אתנו מארץ מצרים המוליך אתנו במדבר בארץ ערבה
 ושוחה בארץ ציה וצלמות בארץ לא עבר בה איש ולא

יֵשֶׁב אָדָם יָשָׁם: וַאֲבִיָּא אַתְּכֶם אֶל אֶרֶץ הַכְּרָמֶל לֹאֲכַל
פְּרִיָּה וְטוֹבָה וּתְבֹאוּ וּתְטַמְּאוּ אֶת אֶרְצִי וְנַחֲלָתִי שְׁמָתָם
לְתוֹעֵבָה: הַכְּתָנִים לֹא אָמְרוּ אִיהָ יְהוָה וּתְפִשִּׁי הַתּוֹרָה לֹא
יִדְעוּנִי וְהָרַעִים פִּשְׁעוּ בִּי וְהַנְּבִיאִים נִבְּאוּ בְּכַף וְאַחֲרֵי לֹא
יִוָּעִלוּ הִלְכוּ: לָכֵן עַד אָרִיב אֶתְכֶם נֹאם יְהוָה וְאֵת בְּנֵי
בְּנוֹכֶם אָרִיב: כִּי עֲבִירוּ אִיִּי כְּתִיִּים וְרָאוּ וְקָדַר שְׁלַחִי
וְהַתְּבוֹנְנֵי מֵאֲדָר וְרָאוּ הֵן הִיתָה כּוֹאֵת: הַחֵימִיר גִּי אֱלֹהִים
וְחָמָה לֹא אֱלֹהִים וְעַמִּי הַמִּיר כְּבוֹדוֹ בְּלֹא וְיָעִיל: שְׁמוֹ
שָׁמַיִם עַל וְאֵת וּשְׁעָרוֹ חֲרָבִי מֵאֲדָר נֹאם יְהוָה: כִּי שְׁתִּים
רַעוּת עִשָּׂה עַמִּי אֶתִּי עֹזְבִי מִקֶּדֶר מִים חַיִּים לְהַצֵּב לָהֶם
בְּאֵרוֹת בְּאֵרֶת נִשְׁבְּרִים אִשָּׁר לֹא יִכְלוּ הַמִּים:

II. Give, in idiomatic Biblical Hebrew (with punctuation) a free paraphrase of the following:

In the reign of Nushirwan, a person sold a piece of ground to another, who, in ploughing it discovered a buried treasure, which he instantly carried to the seller of the field. He, however, would not receive it, because, having disposed of his land he considered that he had made over to the buyer all that it contained. The purchaser, on the other hand, maintained that it was only the land he bought, and therefore the treasure was not his. The Emperor, to whom the dispute was submitted, decided that a marriage should take place between the son and the daughter of two such virtuous men and that the treasure should be theirs. It is further related that the purchased field in that year produced ears of corn so large and full, that they are still preserved in the cabinets of the rich.—*From the Persian.*

SECOND PAPER—THREE HOURS.

1. Translate Isaiah xlvii. 8—15.
2. Parse אֶדֶךְ (v. 8); רָאִנִּי (v. 10); שִׁוְכִבְהֶךָ (v. 10); כְּפָרָה (v. 11); יָדֵנִי (v. 15); לִשְׁבֶּת (v. 14); נִלְאִית (v. 12); הִרְשִׁילִי (v. 11).
3. What different renderings have been given of שִׁוְכִבְהֶךָ (v. 11) and of לִשְׁבֶּת (v. 14)? Parse the words.
4. Give syntactical notes on בָּרַח (v. 9); בָּרַח מִיָּד (v. 9); הָיָה (v. 10); רָבָא (v. 11); כְּאִשֶּׁר (v. 12); מִיִּדְיָעִים (v. 13); מֵאֲשֶׁר (v. 13).
5. Give a critical estimate of the various renderings that have been given of the clause אֲנִי יֹאכְלִי עֵדֶךָ (v. 8).

6. Translate **הברו שמיים** and **הברי ש'** (v. 13), and give the syntax.

7. What different meanings have been given to **ב** in **כרב** (v. 9)?

8. The Sept. rendering of **כתמים** is *ἐξάφνης*. What Hebrew word would yield this rendering?

II. 1. Translate Isaiah lxiii. 1—6.

2. Parse **רין** (v. 3); **אגאלתי** (v. 3); **ראשתומם** (v. 5); **ראבוס** (v. 6).

3. What is the syntax of **דרכתי** . . . **ואדרכם** and **אגאלתי** (v. 3)? Remark on **רין** (v. 3).

4. To what does the suffix in **ואדרכם** in v. 3 refer?

5. **מדבר בעדקה** (v. 1) and **גאולי** (v. 4) admit of more than one rendering. State them.

6. The Vulgate renders **צנה** (v. 1) by "gradiens." What variant reading might this rendering represent? For **אשכרם** in v. 6, some mss. have a word which means "broke them in pieces." What is the word?

7. What change in the first letter of **ללבישך** (v. 2) would simplify the syntax? How might the present form have arisen?

III. 1. Translate Ps. xvi.

2. Parse **ירבר** (v. 4); **אשא** (v. 4); **תומיד** (v. 5); **יכרוני** (v. 7); **אמוט** (v. 8); **ויגל** (v. 9).

3. What is the syntax of **אמרת** (v. 2); **אדירי** (v. 3); **לקדושים** (v. 3); **ירבר** (v. 4)? To what do the suffixes in **נסכיהם** and **שמותם** (v. 4) refer?

4. Remark on **אדני** (v. 2); **מנת** (v. 5); **נהלת** (v. 6).

5. Explain the words **טובתי ככ עליך** (v. 2), and state the various renderings of them that have been given.

6. What is the difficulty in translating v. 3? How would the transposition of the **ר** in **ראדירי** to the beginning of the sentence remove it?

7. Different renderings of **נעצותם** and **אחר מדרי** in v. 4 have been given. Which of them do you adopt, and why?

IV. 1. State how the argument from the historical background of chapters xl.—lxvi. of the Book of Isaiah, has been used to prove that these chapters are not the work of Isaiah.

2. By what arguments has it been maintained that chapters lvi.—lxvi. were written in the time of Nehemiah?

NEW TESTAMENT EXEGESIS.—THREE HOURS.

1. State briefly the views of Schleiermacher, Schwanbeck, Zeller, Lekebusch, and Spitta, as to the composition of the Acts.
2. The writer of the Acts intended to exhibit a parallel between Peter and Paul. Examine and criticise this statement.
3. What phenomena in the extant writings of Luke go to prove that he intended to write another book to follow Acts?
4. Translate Mark xii. 41—44. Compare the Greek of this passage with that of the account in Luke.
5. Translate Mark xiv. 3—9. Compare this with the corresponding passage in Matthew, and comment on the peculiarities in Mark's account.
6. In Mark xiv. 66—72 point out peculiarities of style. Comment on the expression οὐτε οἶδα οὐτε ἐπισταμαι σὺ τί λέγεις, showing what punctuation you favour. What different views have been taken of the word ἐπιβαλὼν in ver. 72?
7. Translate James i. 7, 8, so as to bring out the connection of the clauses.
8. Translate James v. 1—6. Write notes on the tense usage in this passage. How are the last three words connected with what precedes? On what general principle can we explain how the idea came to be expressed in a sentence standing by itself?

APOLOGETICS.—THREE HOURS.

(TEN questions only to be answered.)

1. Criticise and compare the definitions of religion by (1) Kant, (2) Schleiermacher, (3) Hegel, (4) Max Müller.
2. Discuss the necessity of religion, and show how it may be vindicated as against Materialism.
3. State the teleological argument for the Being of God, and show that it is tenable on modern theories of matter and force.
4. Define and give examples of Fetishism, Animism, Totemism, Henotheism, Kathenotheism.
5. Compare the Semitic and the Aryan types of religion, and point out their characteristic differences.
6. State the argument of Celsus against the Incarnation. How was it met by Origen? Compare the modern Unitarian position.
7. Consider the apologetic value of miracles in the light of modern thought. How does the theory of evolution modify our defence of the Incarnation?
8. Criticise the chief theories advanced to explain the resurrection of Christ.

9. How may the Atonement be defended against the objections—(1) that it is impossible, and (2) that it is unnecessary?

10. State Butler's general argument from analogy, and examine its validity. What objections have been taken to the argument, and how may they be met?

11. Criticise the division of religion into Natural and Revealed, and examine the statement—"Christianity is an authoritative republication of natural religion."

12. Draw out Butler's argument for a future life. How does he prove that the government of God is moral, and that our life here is a state of probation?

II.—SECOND DEPARTMENT.

DIVINITY—THREE HOURS.

1. Discuss the Virgin Birth in its bearings on (a) the Incarnation, and (b) the sinless humanity of our Lord.

2. Summarise the teaching of Jesus, as contained in the Synoptic Gospels, on the subject of His Person and Work.

3. Translate and comment upon the following clause in the Symbol of Chalcedon, indicating the erroneous Christological doctrines referred to: *ἐνα καὶ τὸν αὐτὸν Χριστὸν, ἐκ δυῶν φύσεων ἀσυγχύτως, ἀτρέπτως, ἀδιαίρετως, ἀχωρίστως γνωριζόμενον.*

4. Trace the development of the Lutheran and Reformed Christologies, and account for their differences. Give a critical account of any one of the leading Kenotic theories.

5. Formulate briefly the views of the Atonement held by Socinus and Grotius respectively. Contrast the view of Grotius with that of Anselm.

6. State the distinctive principle in the theories of the Atonement propounded by (a) Macleod Campbell, (b) Maurice, (c) Bushnell.

7. How is the forgiveness of sin related to the death of Christ according to (a) Anselm, (b) Schleiermacher, (c) Ritschl, (d) the Westminster Confession?

8. Give a critical estimate of the Ritschlian theology in its leading positions, indicating its merits and its defects. How far was Ritschl influenced by Kant and Schleiermacher?

9. Estimate the value of Ritschl's strictures on the *munus triplex*. What modifications does he propose in this manner of viewing the work of Christ? How does he relate it to the two states of humiliation and exaltation?

10. On what grounds does Ritschl base the doctrine of Christ's Deity? Consider the bearing of "value-judgment" on this belief. Criticise the place given to the Kingdom of God in the Ritschlian System.

CHURCH HISTORY—THREE HOURS.

ENGLAND, SCOTLAND AND IRELAND (1660-1702).

1. Give an account of the Savoy Conference. Indicate its constitution, objects, and results.
2. Describe (*a*) the Act of Uniformity of 1662, (*b*) the Conventicle Act, and (*c*) the Five Mile Act. Trace the various attempts made in this period (1660-1702) to arrive at a plan of Comprehension for Episcopalians and Presbyterians.
3. Describe the Declaration of Indulgence by James II. in 1687. Name the Seven Bishops, and give an account of their trial. Indicate the main provisions of the Act of Toleration of 1689.
4. State what you know of any *two* in each of the following groups: (*a*) Sheldon, Ken, Tillotson, Baxter, Owen; (*b*) Sharp, Leighton, Blackader, Carstares; (*c*) Bramhall, Jeremy Taylor, King.
5. What was the Act Rescissory of 1661? Point out its scope and effects.
6. Indicate the steps by which Prelacy was substituted for Presbytery in Scotland in 1662. Why was this done? Give some account of (*a*) the Church Courts, (*b*) the Forms of Worship, and (*c*) the Confession of Faith established by law from 1662 to 1690.
7. Give examples of the oppressive laws against the Scottish Non-Conformists, and of the manner in which they were administered. Explain the phrases, "The Black Indulgence," "The Sanguinar Declaration," and "The Rabbling of the Curates."
8. Mention the leading Acts of the Scottish Parliament of 1690, and give the main features of the Revolution Settlement. How were the Covenants treated by the Church of Scotland at the Revolution, and how was this regarded in the country?
9. Sketch briefly the Ecclesiastical condition of Ireland at the time of the Restoration.
10. Give an account of the Remonstrance addressed by Irish Roman Catholics to the King, and the proceedings to which it led. Trace the history of the Regium Donum.
11. Indicate the measures taken by James II. to promote Romanism in Ireland, and consider their legality.

BIBLICAL CRITICISM.

a. TEXTUAL CRITICISM—THREE HOURS.

1. What are three great sources of documentary evidence for the text of the New Testament? Explain the limitations of each as witnesses for the original text.
2. What extra-textual marks are frequently found in MSS.? What help may these give in settling the text?

3. *Proclivi scriptioni praeſtat ardua.* State the reason for this canon, and hence deduce the limits for its legitimate use.

4. Describe the Codex Bezae, the Codex Sinaiticus, and the Codex Vaticanus. What is known of the history of each? What are the prominent characteristics of the texts found in them?

5. Group the Uncial Manuscripts of the Gospels, showing their relative value, according to Tregelles.

6. Tell what you know of the MSS. constituting the Ferrar Group.

7. Illustrate the value of geographical considerations in estimating the evidence for the text.

8. State and criticise the arguments adduced by Westcott and Hort in support of their theory of a Syrian Recension.

9. Give some account of the Latin and of the Syriac versions of the New Testament, and of recent investigations into their relations to the Bezan Text.

b. HERMENEUTICS—THREE HOURS.

1. What blemishes in a modern copy of an ancient writing is it the problem of Textual Criticism to remove? What is the problem of Hermeneutics? Distinguish, if you can, between Textual Criticism and Hermeneutics.

2. State the chief points of distinction between Classic Greek and the Greek of the New Testament. What elements have been distinguished in the language of the New Testament? What changes in current views of New Testament Greek have resulted from examination of the Greek papyri recently found in Egypt?

3. Explain the following terms: *διάλεκτος κοινή*, Context, Parallels, Allegory, Parable.

4. Give the various senses of the word "text" as used in Textual Criticism and in Hermeneutics.

5. The range of the Context varies according to the nature of the writing to be interpreted. Illustrate this statement by reference to the different kinds of writing found in the Old and New Testament Scriptures.

6. What causes lead a speaker or writer to use figurative language? Hence deduce the canons to be observed in the interpretation of figurative passages.

7. What causes without and within the Church led to the prevalence of the Allegorical Method of Interpretation in the early ages? What attitude towards this method was taken up by the leading representatives of the School of Antioch?

XIV.—VACATION EXERCISES, *Etc.*, FOR 1906-7.

HEBREW AND SEMITIC LANGUAGES.

Prizes are offered :

- I. To students of Senior Class of 1905-6,
 1. For an Essay on Ecclesiastes.
 2. For an original composition in Hebrew.
 3. For readings in the old Testament Scriptures.
 - II. To students of Junior Class of 1905-6,
 1. For an original composition in Hebrew.
 2. For readings in the Old Testament Scriptures.
 3. For an examination on Müller's Syntax.
- Professions to be given in, in writing, not later than 7th Nov., 1906.

GREEK CLASSES.

Open to any Member of the Greek Class, Sessions 1905-6 and 1906-7.

1. For Attic Prose—Fielding, Author's Preface to *Joseph Andrews* from "Now a Comic Romance is a comic epic poem" to "may laugh at as well as any other."

2. To learn by heart Theocritus II.

3. To learn by heart Demosthenes, *De Corona*, 169-205 Ἐσπέρα μὲν γὰρ ἦν . . . φέρειν ἀνάγκη.

The same student may enter for all the above competitions. Several prizes may be given for each competition. Junior students will be judged on a more lenient standard.

The prose to be sent in by 23rd October, 1906.

HUMANITY CLASS.

Prizes will be given for Vacation Exercises as follows :

- I. Open to all members of the Senior or Honours Class of 1905-1906 :—
To learn by heart Horace, *Odes*, Book III.
- II. Open to all members of the Senior or Honours Class of 1905-1906 :—
For the best short Latin essay upon Party Government.

The examination in I. will be held early in November, 1906. The essays must be sent in to the Professor on or before 1st November. Each exercise must bear a motto, and be accompanied by an envelope bearing the same motto, with the writer's name inside, together with a statement that the exercise is his own unaided work.

CLASS OF BOTANY.

A prize is offered to matriculated students who have passed through the Class of Botany in the University or Queen Margaret College, for the best and approved Herbarium of Scottish Phanerogamous and Vascular Cryptogamous Plants, to be named after Hooker's *Students' Flora of the British Islands*. The specimens must have been collected upon the mainland of Scotland, or upon the Scottish Islands, between 20th April, 1905, and 6th October, 1906, and must have affixed, in addition to the name, the date and locality of collection.

The Herbaria must be sent, addressed to the Professor of Botany, to the University of Glasgow, on or before 6th October, 1906, and with each a sealed note bearing a motto outside, and containing the name of the competitor, with a declaration that the plants in the collection have all been gathered by himself in Scotland, and within the period above stated, and that they have been named by him without assistance, save that derived from books on Herbaria.

The collections must be accompanied by a numbered and arranged list of the plants contained in them.

Students of the first year in Botany are informed that a similar prize will be offered in October, 1907, and are advised to begin collecting for that competition in April, 1906.

MORAL PHILOSOPHY.

A sum of five guineas, given by Mrs. John Caird, will be awarded in prizes to the students who, entering the Honours Class for the first time in session 1906-7, gain the highest marks in an examination on

(a) The general history of Ethics in Britain from Hobbes to Spencer (both included).

(b) The Ethics of Aristotle.

(c) The Ethical theory of Kant.

(d) Bosanquet's Theory of the State.

XV.—FINANCIAL STATEMENT OF THE UNIVERSITY FOR 1904-1905.

INCOME.

I. Parliamentary Grant—			
(a) Under Universities Act, 1889,	£12,180	0	0
(b) Under Education and Local Taxation Act, 1892,	8,700	0	0
II. Class Fees—			£20,880 0 0
(a) Constituting the Fee Fund,	£21,804	16	6
(b) Other Classes,	1,552	17	10
III. Other Fees—			23,357 14 4
(a) Matriculation,	£2,291	2	0
(b) Examination and Graduation,	5,500	13	6
(c) Registration,	316	0	0
(d) Recognition towards expenses of in- spection,	26	5	0
IV. Special Endowments—			8,134 0 6
(a) Chairs,	£2,389	10	9
(b) Lectureships,	1,014	7	4
(c) Demonstratorships, etc.,	474	7	8
			3,878 5 9
V. Teinds (less Ministers' Stipends, £1,609 3s. 10d.), Feu- duties, Ground Annuals, Dividends, Interest, and Rents,			11,229 8 5 $\frac{3}{4}$
VI. Library—			
(a) Carnegie Trust,	£1,000	0	0
(b) Subscriptions,	65	2	0
(c) Revenue of Legacy Funds (including £10 from Euing Fund),	58	0	0
(d) Annual Grant from M'Callum Fund for Celtic Library,	10	0	0
VII. Hunterian Museum—			1,133 2 0
Carnegie Trust towards cost of Catalogue of MSS.,			100 0 0
VIII. Contributions to cost of New Buildings—			
(a) Balance from 1903-4,	£2,500	17	5
(b) Carnegie Trust,	14,590	0	0
(c) Equipment Fund,	15,500	0	0
(d) Advance by University,	919	5	7
	£33,510	3	0
Less Balances on hand,	691	14	6
			32,818 8 6
IX. Contributions to New Endowments—			
(a) Carnegie Trust,	£5,500	0	0
(b) Bellahouston Trust,	6,000	0	0
(c) Equipment Fund,	1,500	0	0
			13,000 0 0
			£114,530 19 6 $\frac{3}{4}$
Deficit,			748 5 4 $\frac{1}{2}$
			<u>£115,279 4 11$\frac{1}{4}$</u>

EXPENDITURE.

I. University Court and Senate—			
(a) Secretary of University Court (including outlays, £40 8s. 4d.),	£440	8	4
(b) Clerk of Senate,	262	10	0
(c) Assistants to Clerk of Senate (including incidental expenses, £95),	712	1	8
			£1,415 0 0
II. General Council—			
(a) Registration,	£113	10	3
(b) Clerk,	100	0	0
(c) Printing and Outlays,	116	14	7
			330 4 10
III. Business—			
(a) Factors (including outlays, £104 7s. 10d.),	£756	0	10
(b) Auditors,	31	10	0
(c) Law Agents,	77	19	0
			865 9 10
IV. Other Expenses of Administration—			
(a) Printing, Stationery, and Advertising,	£1,218	15	9
(b) Queen Margaret College,	93	9	4
(c) Students' Representative Council,	20	0	0
			1,332 5 1
V. Salaries—			
(a) Principal,	£1,100	0	0
(b) Professors under Ordinance No. 25,	24,258	1	5
(c) Other Professors,	2,007	5	4
(d) Lecturers,	6,141	11	9
(e) Assistants and Demonstrators,	7,546	6	10
(f) Examiners (including expenses, £486 0s. 8d.),	2,116	7	1
(g) Reports on Applications for Recognition,	9	9	0
			43,179 1 5
VI. Pensions—			
Pension Fund,	£4,000	0	0
Pension under Ord. No. 25, Sect. XI., 2 (b),	136	18	7
			4,136 18 7
VII. Class Expenses, Apparatus, etc.—			
(a) Prizes and Medals,	£217	2	5
(b) Lantern Slides,	156	11	4
(c) Apparatus and Equipment,	671	9	9
(d) Class Expenses,	3,146	18	3½
			4,192 1 9½
VIII. Library,			
			2,897 7 6
IX. Museum,			
			371 0 4
Carry forward,			£58,719 9 4½
2 U			

Brought forward,	£58,719	9	4½
X. Observatory,	519	19	6
XI. University Buildings—			
(a) Maintenance of Buildings, Upkeep of Grounds, Watching, Service, Cleaning, etc.,	£3,492	10	7
(b) Strong Room for Coins, etc.,	560	0	0
(c) Lighting (including Motive Power, £133 6s. 10d.),	736	1	11½
(d) Heating and Ventilating,	1,167	0	11
(e) Water,	111	13	6
(f) Pathological Institute at Western Infirmary,	331	19	10
(g) Telephone Rentals and Operator's Wages,	86	12	5
(h) Insurance,	414	18	9
(i) Public Burdens, Taxes, etc. (includ- ing £21 to Glasgow Police),	1,077	8	4½
(j) Taxes, Repairs, Lighting, Heating, Service, etc., at Queen Margaret College,	701	19	9½
		8,680	6 1½
XII. Interest,	880	11	0
XIII. Bursaries,	199	5	7
XIV. Chapel,	37	13	7½
XV. Installations—			
(a) Chancellor,	£141	6	8
(b) Lord Rector,	104	13	11
		246	0 7
XVI. Entertainments—			
(a) Graduation Conversazione,	£50	0	0
(b) Opening of New Chemical Labora- tories,	12	5	0
		62	5 0
XVII. Miscellaneous,	115	5	8
XVIII. New Buildings—			
(a) Natural Philosophy	£12,517	11	2
(b) Physiology, Materia Medica, and Forensic Medicine,	16,837	11	2
(c) Chemistry,	3,463	6	2
		32,818	8 6
XIX. Towards Endowment of Chair of Geology,	13,000	0	0
		£115,279	4 11½

I. Faculty of Arts—

CLASS FEES.

Humanity,	£933	9	0
Greek,	349	13	0
English,	700	7	0
French,	378	10	6
German,	119	14	0
Italian,	15	15	0
Hebrew,	161	14	0
Logic,	796	19	0
Moral Philosophy,	671	9	6
Political Economy,	192	3	0
Education,	434	14	0
Philosophy of Law,	—		
Mathematics,	1,075	4	0
Natural Philosophy,	593	5	0
Chemistry,	342	6	0
Botany,	133	7	0
Zoology,	63	0	0
Astronomy,	2	2	0
Geology,	5	5	0
History,	479	6	6
Constitutional Law,	142	16	0
Roman Law,	176	8	0

£7,767 7 6

II. Faculty of Science—

Political Economy,	£6	6	0
Astronomy,	37	16	0
Engineering,	968	12	6
Naval Architecture,	195	6	0
Geology,	69	6	0
Mathematics,	380	2	0
Natural Philosophy,	731	6	6
Chemistry,	848	18	6
Botany,	75	12	0
Zoology,	110	5	0
Physiology,	57	15	0
Anatomy,	31	10	0
Mining,	8	8	0
Public Health,	88	4	0

3,609 7 6

III. Faculty of Medicine—

Botany,	£798	0	0
Zoology,	904	1	0
Physics,	372	15	0
Chemistry,	1,144	10	0
Anatomy,	1,835	18	6
Physiology,	783	6	0
Materia Medica,	841	1	0
Pathology,	810	12	0
Forensic Medicine,	457	16	0

Carry forward, £7,947 19 6 £11,376 15 0

Brought forward,	£11,376	15	0
Faculty of Medicine— <i>continued</i>	£7,947	19	6
Surgery,	683	11	0
Clinical Surgery,	137	4	9
Practice of Medicine,	281	8	0
Clinical Medicine,	79	10	7
Midwifery,	411	12	0
Insanity,	165	18	0
IV. Faculty of Law—			
Law,	£226	16	0
Conveyancing,	231	0	0
Constitutional Law and History,	37	16	0
Civil Law,	92	8	0
Jurisprudence,	34	13	0
Public International Law,	18	18	0
International Private Law,	47	5	0
Political Economy,	—		
Forensic Medicine,	54	12	0
Mercantile Law,	218	8	0
V. Faculty of Theology—			
Divinity,	£144	18	0
Church History,	97	13	0
Biblical Criticism,	105	0	0
Hebrew (see under Faculty of Arts),	—		
VI. Non-qualifying Classes,			
		347	11 0
		988	11 6
		£23,381	17 4
Deduct Fees returned,		24	3 0
		£23,357	14 4

XVI.—GLASGOW PROVINCIAL COMMITTEE FOR THE TRAINING OF TEACHERS.

Sub-Committee on King's Students.

Chairman—Professor Latta, M.A., D.Phil.

Director—John Clark, M.A., Lecturer on Education.

Master of Method—Hugh M'Callum, M.A.

Mistress of Method and Warden of Women Students—Miss

Helen Rutherford, M.A.

Lecturer in Music—James Gallie.

¹ARRANGEMENTS FOR SESSION 1906-7.

THE Committee invite applications for the Session beginning October, 1906, from Candidates desirous of becoming King's Students and of

¹ These arrangements may be modified if the new "Regulations for the Training and Certification of Teachers," proposed by the Scotch Education Department, be approved by Parliament.

thus qualifying for the Teacher's Certificate granted by the Scotch Education Department.

The Committee's Scheme provides for the Training of both Graduates and Non-Graduates. The Course of Study embraces, in addition to classes qualifying for graduation, such professional subjects as are necessary for the practical training of Teachers. The Course extends over three winter and three summer sessions. Students are expected to enter upon the Course in the first year of their University attendance, but those who have already attended University Classes for Graduation may be accepted subject to the approval of the Scotch Education Department, and in their case the period of training may be made as nearly as possible coterminous with the completion of the Degree Course. For Graduates a one year's Course of Study in extra-University subjects will, as a rule, be deemed sufficient.

Students trained under this scheme are recognised as Certificated Teachers by the Scotch Education Department, without further examination. All Students must follow a Course of Study leading to Graduation, but the obtaining of a Degree is not a necessary condition of receiving a certificate.

Candidates must be not less than eighteen years of age on 1st October preceding their recognition as King's Students, and must have passed the whole Preliminary Examination in Arts or Science, or its equivalent. They will not be accepted under Article 96b unless they possess such Leaving Certificates as qualify them to begin a Course of Study for graduation at the University. Candidates who possess the necessary qualifications should make application *as soon as possible*, and *in any case not later than 1st May, 1906*, and any who intend to complete their Preliminary Examination or its equivalent by October next should make provisional application before the same date.

All accepted candidates, except those admitted as fee-paying students, must sign a Declaration and undertaking that they intend to adopt and follow the profession of teacher, and to serve in state-aided schools (primary or secondary) during the period necessary for the obtaining of the Parchment Certificate in terms of article 51 of the Scotch Education Code. No fee is charged for instruction in the extra-University subjects in the case of those signing the above Declaration.

With a view to provide for students who desire to teach in schools other than those indicated, the Committee are prepared to accept, on payment of a fee of £5 *per annum*, a limited number of students who may not wish to sign the said Declaration.

The Committee are also prepared to consider applications for a limited number of scholarships of varying amount, from students who may require aid in the prosecution of their studies. Such students must sign, *in addition to the Declaration, an Obligation to repay all monies paid to them or on their behalf, in the event of their failure to implement the Declaration and undertaking.* As the said scholarships are granted subject to the approval of the Scotch Education Department, applicants should forward the necessary particulars to guide the Committee in their recommendations.

King's Students proceeding to the ordinary Degree in Arts, must take their University classes according to the following scheme :

1st Year. *Obligatory : Latin and Mathematics.

2nd Year. †Obligatory : Logic or Moral Philosophy and Education.

Optional : One of the following—Greek, French, German, Chemistry, History.

3rd Year. Obligatory : English Literature and Natural Philosophy.

Students who have already begun their University Course or who intend to graduate with Honours or in Science must submit, for the approval of the Committee and of the Scotch Education Department, the Course of Study they propose to follow.

Students are strongly recommended to take the Diploma in Education, and in their third year to take as the extra subject necessary for that purpose, Logic or Moral Philosophy, or one of the optional subjects mentioned above.

Adequate arrangements have been made for the teaching of the following extra-University subjects, and the time-table has been so adjusted in relation to attendance at the University classes, as to make a minimum demand on the time of the students during the ordinary University winter session : Practice in Teaching. Instruction in Method, Music, Drawing and kindred subjects, Physical Training, Needlework, Practical Science and Nature-Study generally, History, Geography, Phonetics, and Religious Instruction. Arrangements will also be made for a preliminary course of reading in English authors, which in terms of the code is required of all students prior to their attending the English Literature class.

During the winter session, the time devoted to the study of extra-University subjects, including practical teaching, will probably be from five to eight hours per week.

In connection with the practical work of teaching, the School Boards of Glasgow and Govan have placed their schools at the disposal of the Committee, and meanwhile the following five have been selected for the criticism lessons given under the direction of the Master of Method recently appointed by the Committee : Willowbank, Napiershall, Woodside, Dowanhill, and Church Street. Visits of observation will also be paid to typical Elementary, Higher Grade, and High Schools, in order that students may have an opportunity of gaining experience of classes at every stage up to the level of the University Preliminary Examination and the Honours Leaving Certificate Examination.

During the third winter session the extra-University work will consist almost entirely of school visitation and practical teaching.

All communications relative to the scheme should be sent to the *Director, Local Committee for the Training of Teachers, The University, Glasgow*, from whom forms of application may be obtained.

* The Committee will prescribe an alternative to Latin or Mathematics in the first year in the case of students who have passed their Preliminary Examination on the lower standard in either subject, as such students are not entitled to attend the graduating class. *But students are strongly advised not to begin their Course until they have passed both in Higher Latin and Higher (or Intermediate) Mathematics.*

† Students are recommended to include a modern language in their course.

XVII.—EXTRA-ACADEMICAL TEACHING.

N.B.—Every application for recognition must be accompanied by a payment to the University Factors, Messrs. Hill & Hoggan, 194 Ingram Street, Glasgow, of a fee of £5 5s. to be placed to the credit of a fund for defraying the cost of investigation by experts of the fitness of the teacher applying, and of the accommodation, apparatus, and teaching appliances at the disposal of the teacher.

The following regulations for the recognition of Extra-Academical Teaching under Ordinances Nos. 12, 14, 23, and 134, were adopted by the University Court on 14th June, 1894, and afterwards amended in June, 1905.

IN THE CASE OF INDIVIDUAL EXTRA-ACADEMICAL TEACHERS.

I. Every application shall be made to the Secretary of the University Court and shall supply the following information :—

- (a) The registrable or other qualification or qualifications of the applicant.
- (b) A statement of his opportunities of studying the subject and the length of time devoted thereto.
- (c) A statement of his experience in teaching the subject.
- (d) A note of any of his published articles or works on the subject.
- (e) The appointments which he holds as a teacher of the subject in which he requests recognition, and a statement whether the course for which recognition is sought has previously been conducted by him, and if so, for how long. If the applicant is a teacher in a Medical School, College of Science, or other similar Institution, the most recent issue of the Calendar of such School, College, or Institution, should be forwarded.
- (f) The number of meetings to which the course extends, whether each meeting is for one hour or longer, and a statement of the proportion of the course to be devoted to lectures, practical demonstrations, examinations and tutorial work. In the case of a practical course, information should be given as to the manner of conducting it, the number of examinations, oral or written, and whether or to what extent lectures or tutorial work form part of the course. It should also be stated whether, besides the teacher for whom recognition is sought, assistants or demonstrators take part in conducting the course (whether systematic or practical), and, if so, their number, qualifications, and the extent to which they take part in conducting the course. A syllabus of the subjects treated in the course and of the books proposed for the use of students should also be sent in every case.

- (g) The hour or hours at which the course is conducted.
- (h) The accommodation, apparatus, and teaching appliances provided for the class.
- (i) The teaching or examining bodies which have recognized his course.

II. In the case of an applicant conducting courses in Glasgow or its neighbourhood an inspection shall be made of his accommodation and appliances for teaching.

III. Every Extra-Academic Teacher in Glasgow whose course has been recognized under any of the Ordinances enumerated above, shall, at the commencement of each session, call the attention of his whole class to the regulations as to enrolment and payment of fee at the University by all students who desire afterwards to graduate there; he shall also call attention to the University requirements as to preliminary examination (more stringent in the case of medical students than the minimum required by the General Medical Council); and shall advise any students looking forward to a University degree to procure from the Matriculation Office a copy of the syllabus of regulations applicable to their course.

IV. Every recognized Extra-Academical Teacher shall annually within one month of the close of the session furnish the University Court with a return of

- (a) The number of students who have attended the recognized course or courses, in such manner as to qualify *pro tanto* for graduation in a Scottish University.
- (b) Any change that may have been made in the accommodation or appliances provided.
- (c) A statement showing, for the year next ensuing, the number of meetings to which the course extends, whether each meeting is for one hour or longer, and the proportion of the course to be devoted to lectures, practical demonstrations, examinations, and tutorial work. In the case of a practical course information should be given as to the manner of conducting it, the number of examinations, oral or written, and whether, or to what extent lectures or tutorial work form part of the course. It should also be stated whether, besides the recognized teacher, assistants, or demonstrators take part in conducting the course (whether systematic or practical), and if so, their number, qualifications, and the extent to which they take part in conducting the course. A syllabus of the subjects to be treated in the course, and of the books proposed for the use of students, should also be sent.

V. The certificate of attendance granted by Extra-Academical Teachers should in all cases state the number of lectures or meetings for practical instruction in the course, the number of occasions on which the student was present, the fee charged, and bear that the student has duly performed the work of the class.

VI. Every candidate not being a matriculated student attending the course of an Extra-Academical Teacher in Glasgow, recognized for the purposes of graduation in Medicine or Science, must at the

commencement of each year enrol his name in a book kept at the University for that purpose, paying a fee of the same amount as the matriculation fee, and having in respect thereof a right to the use of the University Library. (Ord. No. 12, § V. ; Ord. No. 14, § VIII. 5 ; Ord. No. 23, § VI. ; Ord. No. 134, § V.)

VII. The fee for attendance for the purposes of graduation on the courses of instruction of an Extra-Academical Teacher in Glasgow shall not be less than the fee for the corresponding University Class. (Ord. No. 12, § IV. 2 ; Ord. No. 14, § VIII. 6 ; Ord. No. 23, § IV. 2 ; Ord. No. 134, § V. 2.)

VIII. The Court will not in any case recognize for the purposes of graduation in Medicine the course of any teacher who teaches at the same time more than one of the subjects, except where the applicant is a professor or teacher of any endowed public college or institution, who, by the terms of his appointment, is required to teach more than one of the subjects, and in that case recognition can be granted in one subject only. (Ord. No. 14, § VIII. 7.)

IX. It is a condition of every recognition granted by the Court that it can be withdrawn or suspended at any time if the Court see fit.

X. The recognition of any teacher who fails to furnish the information required in terms of Regulation IV., or a sufficient explanation relative to such failure, or who has ceased for the period of two consecutive sessions to teach the subject in which he is recognized, shall *ipso facto* terminate.

IN THE CASE OF SCHOOLS OR INSTITUTIONS.

I. Every application shall be made to the Secretary of the University Court, and shall supply the following information :—

- (a) A statement of the number of teachers and a detailed syllabus of the curriculum courses proposed to be given, or, in the case of practical classes, information of a similar kind.
- (b) The number and duration of lectures proposed to be given and the number of examinations, whether written or oral, deemed necessary, or in the case of a practical class, information of a similar kind. It should also be stated whether assistants or demonstrators take part in conducting the courses (whether systematic or practical).
- (c) The hours of lectures.
- (d) The teaching or examining bodies which have already recognized the curriculum or certificate of the school or institution making application.
- (e) A statement as to the accommodation, apparatus, and appliances at the disposal of the teachers in the school or institution making application.
- (f) A note of the fees proposed to be charged.

II. The Court shall, if it thinks fit, cause an inspection to be made of the accommodation, apparatus, and teaching appliances provided by the school or institution making application.

III. Every recognized school or institution shall annually within one month of the close of the session furnish the University Court with a return of

- (a) The number of students who have attended the recognized school or institution in such manner as to qualify *pro tanto* for graduation in the University.
- (b) Any change that may have been made in the accommodation or appliances provided.
- (c) A statement showing, for the year next ensuing, the number of meetings to which the courses extend, whether each meeting is for one hour or longer, and the proportion of the courses to be devoted to lectures, practical demonstrations, examinations, and tutorial work. In the case of practical courses information should be given as to the manner of conducting them, the number of examinations, oral or written, and whether, or to what extent, lectures or tutorial work form part of the courses. It should also be stated whether assistants or demonstrators take part in conducting the courses (whether systematic or practical).

IV. The certificates of attendance granted by recognized schools or institutions should in all cases state the number of lectures or meetings for practical instruction in the courses, the number of occasions on which the student was present, the fees charged, and bear that the student has duly performed the work of the classes.

V. The fees for attendance for the purposes of graduation on the courses of instruction in a recognized school or institution shall not be less than the fees for the corresponding University classes. (Ord. No. 12, § IV. 2; Ord. No. 14, § VIII. 6; Ord. No. 23, § IV. 2; Ord. No. 134, § IV. 2.)

VI. It is a condition of every recognition granted by the Court that it can be withdrawn or suspended at any time if the Court see fit.

LIST OF EXTRA-ACADEMICAL TEACHERS.

List of Extra-Academical Teachers recognized by the University Court of the University of Glasgow, for the purpose of Graduation in Medicine and Science, in terms of Ordinances of the Universities Commissioners (1858 and 1889), the names of those who are recognized for Graduation in Science being printed in *italics*.

19 April, 1876,	Dr. James Gow Black, Otago,	<i>Chemistry.</i>
“	Miller Coughtrey, M.B., Otago,	<i>Anatomy.</i>
7 Nov., 1876,	John Dougall, M.D., Glasgow,	<i>Materia Medica.</i>
12 Sept., 1877,	A. M. Buchanan, M.D., Glasgow,	<i>Anatomy.</i>
21 Dec., 1880,	William Craig, M.D., Edinburgh,	<i>Materia Medica and Therapeutics.</i>
24 May, 1881,	Byrom Bramwell, M.D., Edin- burgh,	<i>Practice of Medicine.</i>
22 July, 1885,	Reginald W. Phillips, B.A., B.Sc., University Coll., Bangor,	<i>Botany.</i>
4 Oct., 1887,	Claud M. Thompson, University College, Cardiff,	<i>Chemistry.</i>

4 Oct., 1887,	W. Newton Parker, University College, Cardiff,	<i>Zoology.</i>
27 Feb., 1890,	James Robertson Watson, M.A., Glasgow,	<i>Chemistry and Practical Chemistry.</i>
„	Philip J. White, M.B., University College, Bangor,	<i>Zoology.</i>
28 April, 1892,	James Swanson, M.A., M.B., C.M., St. Mungo's Coll., Glasgow,	<i>Botany.</i>
23 Feb., 1893,	J. W. Carr, M.A., University College, Nottingham,	<i>Botany.</i>
27 April, 1893,	G. G. Henderson, D.Sc., Glasgow and West of Scotland Technical College [also for Medicine],	<i>Chemistry.</i>
20 July, 1893,	J. Berry Haycraft, M.D., University College, Cardiff,	<i>Physiology.</i>
9 Nov., 1893,	J. F. King, Edinburgh,	<i>Chemistry.</i>
„	D. N. Paton, M.D., Edinburgh,	<i>Physiology and Practical Physiology.</i>
„	F. W. N. Haultain, M.D., Edinburgh,	<i>Midwifery.</i>
„	G. A. Gibson, M.D., Edinburgh,	<i>Practice of Medicine.</i>
„	R. W. Philip, M.D., Edinburgh,	<i>Practice of Medicine.</i>
14 Nov., 1893,	Dawson Turner, M.D., Edinburgh,	<i>Physics.</i>
8 Feb., 1894,	J. W. B. Hodsdon, M.D., Edinburgh,	<i>Surgery.</i>
„	H. E. Clark, C.M.G., M.R.C.S., Glasgow,	<i>Surgery.</i>
14 June, 1894,	George T. Beatson, M.D., Glasgow,	<i>Surgery.</i>
„	Francis M. Caird, M.B., C.M., Edin.,	<i>Surgery.</i>
„	Alexander James, M.D., School of Medicine, Edinburgh,	<i>Practice of Medicine.</i>
„	William Russell, M.D., School of Medicine, Edinburgh,	<i>Pathology and Practical Pathology.</i>
„	Henry Alexis Thomson, M.D., Minto House, Edinburgh,	<i>Surgery.</i>
2 Aug., 1894,	George B. Todd, M.B., C.M., Anderson's College, Glasgow,	<i>Zoology.</i>
13 Dec., 1894,	R. Stanfield, A.R.S.M., A.M. Inst. C.E., Heriot Watt Coll., Edin.,	<i>Mechanical Engineering.</i>
„	John Gibson, Ph.D., Heriot Watt College, Edinburgh,	<i>Chemistry and Chemical Laboratory.</i>
14 Feb., 1895,	A. H. Trow, B.Sc., University College, Cardiff,	<i>Botany.</i>
12 Dec., 1895,	Peter Bennett, Anderson's College Medical School, Glasgow,	<i>Physics.</i>
9 Jan., 1896,	Charles Workman, M.D., Royal Infirmary, Glasgow,	<i>Pathology and Practical Pathology.</i>
18 June, 1896,	John Edgar, M.A., B.Sc., M.B., Anderson's College Medical School, Glasgow,	<i>Midwifery.</i>
„	George A. Gibson, M.A., LL.D., Glasgow and West of Scotland Technical College,	<i>Mathematics.</i>

9 July, 1896,	Alexander MacLay, B.Sc., C.E., Glasgow and West of Scotland Technical College,	<i>Engineering Drawing and Design.</i>
12 Nov., 1896,	John Lindsay Steven, M.D., Glasg.,	<i>Practice of Medicine.</i>
"	Francis G. Baily, M.A., Heriot Watt College, Edinburgh,	<i>Physics and Electrical Engineering.</i>
6 May, 1897,	Richard J. A. Berry, M.D., F.R.C.S.E., New School of Medicine, Edinburgh,	<i>Anatomy.</i>
9 June, 1898,	John Carswell, L.F.P.S.G., L.R.C.P.E., Anderson's Col- lege Medical School, Glasgow,	<i>Mental Diseases.</i>
"	J. R. Whitaker, M.B., Surgeon's Hall, Edinburgh,	<i>Anatomy and Prac- tical Anatomy.</i>
10 Nov., 1898,	Hugh Galt, M.B., C.M., St. Mungo's College,	<i>Forensic Medicine and Public Health.</i>
"	Robert A. Fleming, M.D., School of Medicine, Edinburgh,	<i>Practice of Medicine.</i>
13 July, 1899,	A. L. Selby, M.A., University Coll. of South Wales, Cardiff,	<i>Physics.</i>
"	D. R. Paterson, M.B., University Coll. of South Wales, Cardiff,	<i>Practical Pharmacy.</i>
9 Nov., 1899,	Theodore Shennan, M.D., School of Medicine, Edinburgh,	<i>Pathology.</i>
26 April, 1900,	H. Harvey Littlejohn, M.A., M.B., B.Sc., Edinburgh,	<i>Medical Jurisprud- ence and Public Health.</i>
"	Carstairs C. Douglas, B.Sc., M.D., Anderson's College Medical School, Glasgow,	<i>Medical Jurisprud- ence and Public Health.</i>
10 July, 1900,	J. C. Beattie, D.Sc., South African College, Cape Town,	<i>Natural Philosophy.</i>
"	P. D. Hahn, Ph.D., South African College, Cape Town,	<i>Chemistry.</i>
14 Mar., 1901,	John W. Paterson, West of Scotland Agricultural College,	<i>Agricultural Chem- istry.</i>
"	A. N. M'Alpine, West of Scotland Agricultural College,	<i>Agricultural Botany.</i>
"	J. J. F. X. King, West of Scotland Agricultural College,	<i>Agricultural Ento- mology.</i>
"	John R. M'Call, West of Scotland Agricultural College,	<i>Veterinary Hygiene.</i>
3 Oct., 1901,	Alexander Macphail, M.B., St. Mungo's College,	<i>Anatomy.</i>
14 Nov., 1901,	T. K. Monro, M.A., M.D., St. Mungo's College,	<i>Practice of Medicine.</i>
1 May, 1902,	Marion T. Newbigin, D.Sc., Medical College for Women, Edinburgh,	<i>Zoology.</i>
10 July, 1902,	Harry Bamford, M.Sc., West of Scotland Agricultural College,	<i>Agricultural Engin- eering.</i>

- 1 Dec., 1902, *Daniel Burns*, Glasgow and West of Scotland Technical College, *Geology*.
- 18 June, 1903, *Magnus Maclean, M.A., D.Sc.*, Glasgow and West of Scotland Technical College, *Electrical Engineering*.
- 18 June, 1903, *W. H. Watkinson, M.I.M.E.*, Glasgow and West of Scotland Technical College, *Mechanical Engineering*.
- „ *John G. Longbottom, A.R.C.S.*, Glasgow and West of Scotland Technical College, *Civil and Mechanical Engineering*.
- „ *Hamilton C. Marr, M.D., F.F.P.S.G.*, St. Mungo's College, Glasgow, *Insanity*.
- „ *James H. Nicoll, M.B., F.F.P.S.G.*, Anderson's College Medical School, Glasgow, *Surgery*.
- „ *Archibald A. Scot Skirving, C.M.G., M.B., M.R.C.S. (Eng.), F.R.C.S. (Edin.)*, 27 Nicolson Square, Edinburgh, and School of Medicine of the Royal Colleges, Edinburgh, *Surgery*.
- 12 Nov., 1903, *Gilbert Thomson, M.A., C.E.*, Glasgow and West of Scotland Technical College, *Sanitary Engineering*.
- „ *Daniel Burns*, Glasgow and West of Scotland Technical College, *Mining*.
- 11 Feb., 1904, *John H. A. McIntyre, M.I.M.E.*, Glasgow and West of Scotland Technical College, *Mensuration and Drawing*.
- 21 July, 1904, *J. C. Beattie, D.Sc.*, South African College, Cape Town, and *Alexander Brown, B.A., B.Sc.*, South African College, Cape Town, conjointly, *Physics*.
- „ *H. H. W. Pearson, M.A.*, South African College, Cape Town, *Botany*.
- „ *H. H. W. Pearson, M.A.*, South African College, Cape Town, *Botany for First B.Sc.*
- „ *G. H. Gemmell*, School of Medicine of the Royal Colleges, Edinburgh, *Practical Chemistry*.
- „ *David Hepburn, M.D.*, University College, Cardiff, *Anatomy and Practical Anatomy*.
- „ *Robert Jardine, M.D.*, St. Mungo's College, Glasgow, *Midwifery*.
- 9th Feb., 1905, *Alexander Bruce, M.D.*, Surgeon's Hall, Edinburgh, *Practice of Medicine*.
- „ *Leonard A. L. King, B.A.*, St. Mungo's College, Glasgow, *Zoology*.
- 8 June, 1905, *R. F. Muirhead, D.Sc.*, Western Medical School, Glasgow, *Mathematics*.

8 June, 1905,	W. F. A. Hudson, M.A., West of Scotland Agricultural College,	<i>Forestry.</i>
„	R. Barclay Ness, M.A., M.B., Anderson's College Medical School,	<i>Practice of Medicine.</i>
„	Leonard A. L. King, B.A., St. Mungo's College, Glasgow,	<i>Zoology for First B.Sc.</i>
6 July, 1905,	John M. Cowan, B.A., M.D., D.Sc., Western Medical School, Glasgow,	<i>Practice of Medicine.</i>
„	George H. Edington, M.D., M.R.C.S., Western Medical School, Glasgow,	<i>Surgery.</i>
14 Dec., 1905,	David A. Farquharson, M.B., St. Mungo's College, Glasgow,	<i>Physiology.</i>
„	A. Ogg, M.A., B.Sc., Rhodes University College, Grahamstown, Cape Colony,	<i>Physics.</i>
„	George E. Cory, M.A., Rhodes University College, Grahamstown, Cape Colony,	<i>Chemistry.</i>
„	S. Schönland, Ph.D., Rhodes University College, Grahamstown, Cape Colony,	<i>Botany.</i>
„	J. E. Duerden, Rhodes University College, Grahamstown, Cape Colony,	<i>Zoology.</i>
„	J. D. F. Gilchrist, M.A., D.Sc., South African College, Cape Town,	<i>Zoology.</i>
„	J. D. F. Gilchrist, M.A., D.Sc., South African College, Cape Town,	<i>Zoology for First B.Sc.</i>
„	J. A. Wilkinson, M.A., Transvaal Technical Institute, Johannesburg,	<i>Chemistry.</i>
„	H. Lyster Jameson, M.A., D.Sc., Transvaal Technical Institute, Johannesburg,	<i>Zoology.</i>

And the ordinary Physicians and Surgeons of any General Hospital in the United Kingdom which accommodates not fewer than eighty patients, and possesses a distinct staff of Physicians and Surgeons. (See Ordinance No. 14, Section VII. (5).)

LIST OF INSTITUTIONS OR SCHOOLS.

List of Schools or Institutions recognized by the University Court of the University of Glasgow, for the purpose of Graduation in Medicine, Law, Science, and Theology, in terms of Ordinances of the Universities Commission (1889).

- 14 Nov., 1895, LONDON SCHOOL OF MEDICINE FOR WOMEN, in respect of the following courses: *Chemistry (Systematic and Practical), Anatomy (Systematic and Practical), Physiology (Systematic and Practical), Practical Pharmacy, Practical Pathology, Medical Jurisprudence and Public Health, Clinical Surgery, Clinical Medicine, Practical Midwifery, Mental Diseases, Out-Practice or Dispensary and Vaccination.*
- 23 Mar., 1896, UNIVERSITY OF NEW ZEALAND. If a candidate for the First Professional Examination in this University has obtained a Degree in Science or in Arts in the University of New Zealand, granted after a course of study and an examination in Botany, Zoology, Physics, or Chemistry, such candidate is exempted from the examination in such subject or subjects. (Ordinance No. 54, Section IV.)
- 23 July, 1896, UNIVERSITIES OF OXFORD, CAMBRIDGE, AND DUBLIN, AND THE FOUR INNS OF COURT, LONDON. The above are recognized for the purposes of Graduation in Law under Ordinance No. 39 [General No. 11.—Regulations for the Degree of Bachelor of Laws (LL.B.)] and subject to Section II. thereof.
- 11 Mar., 1897, GLASGOW EYE INFIRMARY.
- 10 Nov., 1898, UNIVERSITY OF LOUVAIN. This University has been approved by the University Court as a University in which Courses for the four subjects represented in the First Science Examination may be taken and reckoned *pro tanto* under Ordinance No. 23, Section IV. (2).
- 13 April, 1899, HARVARD UNIVERSITY, BOSTON, U.S.A. Approved under Ordinance No. 23, Section IV.
- 12 June, 1902, WESTMINSTER COLLEGE, CAMBRIDGE. Recognized under Ordinance No. 63, Section I.
- 12 Nov., 1903, UNIVERSITY OF NEW ZEALAND. Recognized under Ordinance No. 63, Section I.
- 10 Nov., 1904, THEOLOGICAL COLLEGE OF THE EPISCOPAL CHURCH IN SCOTLAND. Recognized under Ordinance No. 63, Section I.
- 6 July, 1905, ROYAL INSTITUTE OF PUBLIC HEALTH, LONDON. Recognized for the purposes of Section IV., Sub-Section (1) of Ordinance No. 2 of the University Court (Degrees in Science in Public Health).
- „ ROYAL ARMY MEDICAL COLLEGE. Recognized for the purposes of Section IV., Sub-Section (1) of Ordinance No. 2 of the University Court (Degrees in Science in Public Health).

XVIII.—UNIVERSITY SOCIETIES.

GLASGOW UNIVERSITY UNION.

At a Meeting of Students and Graduates, held on the 14th day of February, 1885, it was unanimously resolved to establish a Glasgow University Union. A sum sufficient to erect a building for this purpose having been offered to the Senate by the late JOHN M'INTYRE, Esq., M.D., Odiham, Hampshire, and the Senate having accepted this gift, Articles of Constitution were drawn up by a Committee of Students and Graduates, and received the approval of the Senate, the Donor, and of the Students' Representative Council. A further sum of £12,000 was raised by the Union Bazaar of 1889, and devoted to furnishing and endowing the building. In 1893, to meet the increasing membership, the building was largely extended at a cost of £2800. The Union is governed by a Committee of Management which is elected annually at the General Meeting of the Members.

Objects.—The objects of the Union are to provide Students with the comforts and conveniences of a Social Club, to hold debates, and to form a centre to which the various University Societies may be affiliated. The Buildings comprise a Debating Hall, a Dining Hall, Reading and News Rooms, Billiard and Smoking Rooms, Committee Rooms, Lavatories, etc.

Membership.—The Members of the Union are Ordinary Members or Life Members.

Ordinary membership of the Union is open to all matriculated Students and all former Students of the University, and all Medical Students of Glasgow whose names are enrolled in the Extra-mural Album of the University, on payment of an Annual Subscription of Seven Shillings and Sixpence. Students may join for the summer Session only, on payment of Four Shillings.

All matriculated Students and former Students of the University may, on payment of the sum of Three Pounds Three Shillings, become Life Members of the Union.

President—C. P. Williamson.

Vice-President—James J. MacLehose, M.A.

Hon. Secretary—A. S. Wallace, The Union.

Hon. Treasurer—Allan F. Baird.

Assistant Secretary and Treasurer—F. C. Macaulay.

Librarian—J. C. Watson.

Convener of Games Committee—J. A. Smith.

Committee of Management—The Office-bearers; A. J. Fleming, LL.B.; D. A. Dick, M.A.; Dr. J. Muir; F. A. Farrell; J. M. Miller; R. H. Napier, M.A.; R. M. Grant, M.A.; Dr. J. Bain; Dr. J. I. Greig; D. H. Wilson, M.A.

Former Presidents of the Union.

1890. John H. Harley, M.A.	1898-99. William F. Smillie.
1890-91. Robert G. Bell, M.D.	1899-1900. George F. Buchan,
1891-92. John Paterson, M.A., M.B.	M.B.
1892-93. F. A. Macquisten, B.L.	1900-01. Ivy M'Kenzie, M.A.,
1893-94. Joshua Ferguson, M.A., M.B.	B.Sc., M.B.
1894-95. Joshua Ferguson, M.A., M.B.	1901-02. Andrew F. Bell, M.B.
1895-96. J. A. Stokes Little, M.A.	1902-03. G. D. Valentine, LL.B.
1896-97. W. C. Henderson, M.A.,	1903-04. C.M. Drew, M.A., M.B.
B.Sc. (resigned Oct., 1896).	1904-05. D. J.M'Leish, M.A., B.Sc.,
1896-97. A. M. Scott, M.A.	M.B. (resigned Oct., 1904).
1897-98. John C. Monteith, M.A.	1904-05. J. I. Greig, M.A., B.Sc., M.B.
1905-06. John M. Miller.	

THEOLOGICAL SOCIETY.

The object of the Society is to discuss, by means of essays and debates, theological and ecclesiastical questions. The membership of the Society is open to all students attending the Divinity Hall of the University: but all matriculated Students in faculties other than the Faculty of Theology are eligible for extraordinary membership.

Office-Bearers for 1906-7.

Honorary President—(Not appointed yet).

President—J. Hutchison Cockburn, M.A.

Vice-President—Alexander Moffatt, M.A.

Secretary—W. N. Bell, M.A., 19 Eton Place, Glasgow, W.

Treasurer—Neil M'Caig, M.A.

Committee.

H. Dunn, M.A.

J. A. Swan, M.A.

R. S. Armstrong, M.A.

W. D. Macgill, M.A.

(With two students of the first year in Divinity to be elected in November.)

GLASGOW UNIVERSITY MEDICO-CHIRURGICAL SOCIETY.

(Founded 1802.)

This Society has as its principal object the prosecution of medical study by essays, debates, lantern and microscopical demonstrations, and during the summer by visits to Institutions and other places of interest to medical students.

All medical Students and medical Graduates of less than one year's standing are eligible for Ordinary Membership, on payment of the annual subscription of One Shilling and Sixpence. All who at the close of their last winter's session shall have been members for two years, may become Life Members on payment of Five Shillings.

Meetings of the Society are held in the Union on Friday evenings during the winter session.

*Office-Bearers for 1906-7.**Honorary President*—R. H. Parry, F.F.P.S.G., etc.*President*—Matthew J. Stewart.*Honorary Secretary*—John Steedman.*Minute Secretary*—R. M. F. Picken, B.Sc.*Treasurer*—Alex. T. A. Gourlay.*Demonstrator*—Samuel Wilson, M.A.*Librarian*—John Cruickshank.*Committee.*

W. M. Elliott.

John Weir.

K. C. Middlemiss.

Hugh C. Storrie.

W. Rutherford.

Jas. L. Cochrane.

A. S. Richmond.

C. L. Sutherland.

Also two members to be appointed in November.

Books are given out at the ordinary meetings, or on written application to the Librarian.

DIALECTIC SOCIETY.

(Established 1862.)

The Society meets weekly in the Union Debating Hall during the Session for the discussion of Literary, Philosophical, and Political subjects.

All matriculated men Students are eligible for Ordinary Membership. The Annual Subscription is One Shilling and Sixpence. (Members of the Union One Shilling.)

Honorary President.

W. Macneile Dixon, Litt.D., Professor of English Language and Literature.

President—R. M. Grant, M.A.*Vice-Presidents.**Senior*—R. P. Thomson.*Junior*—A. Gordon.*Secretaries.*

Senior—John W. Anderson, M.A., Teith- } *Junior*—J. G. Ritchie.
side, Callander, Perthshire. }

Treasurer—A. D. Muir.*Macer*—T. D. M. Latta.*General Board.*

R. F. Rattray.

W. L. Marsh.

R. M. Mathams.

Geo. Barclay.

G. S. Fraser.

B. I. Macalpine.

T. L. Turner, M.A.

H. A. Reyburn.

GLASGOW UNIVERSITY ORIENTAL SOCIETY.

(Instituted 1880.)

The object of the Society is the study of the languages and literatures of the East.

All Students of Oriental languages are eligible for election to the membership.

The Society meets twice a year—in the months of April and October.

Office-Bearers.

President—Rev. Professor James Robertson, D.D.

Vice-President—Robert B. Pattie, B.D.

Corresponding Secretary—Rev. James Young, B.D.

Recording Secretary—Rev. George Anderson, B.D.

Treasurer—Rev. Robert Gardner, B.D.

GLASGOW UNIVERSITY ALEXANDRIAN SOCIETY.

This Society was formed in January, 1887. It has for its chief object the discussion of questions connected with the literatures of Ancient Greece and Rome. The membership is open to Members of the University. Any distinguished Scholar or any Member of the University of five years' standing, or any person officially connected with the University, is eligible for Honorary Membership.

*Office-Bearers.**Honorary Presidents.*

Professor G. G. Ramsay, LL.D. | Professor J. S. Phillimore, M.A.

Professor W. M. Dixon, Litt.D.

President—J. L. Morison, M.A.

Vice-Presidents { H. I. Cunningham.
T. N. McIlravey.

Secretary—R. M. Mathams.

Treasurer—R. G. McDowall.

Committee.

R. Gibson.

B. K. N. Wyllie.

H. J. Paton.

J. R. Scott.

B. I. Macalpine.

And one to be elected at the beginning of Session 1906-7.

GLASGOW UNIVERSITY PHILOSOPHICAL SOCIETY.

(Instituted 1887.)

This Society was instituted for the promotion of Philosophical Discussion and Investigation. It meets on alternate Wednesday Evenings at Eight o'clock during the Winter Session, in the Union. Ordinary Membership is open to all students who have attended or are attending Philosophical Classes in any University. The annual subscription is one shilling for those who join through the Union, and one shilling and sixpence for those who do not.

*Office-Bearers for Session 1906-7.**Honorary President*—Professor A. C. Bradley, LL.D.*Honorary Vice-Presidents.*

The Principal,	} <i>Ex-Officiis.</i>
Professor Jones, LL.D.,	
Professor Latta, D. Phil.,	
Professor Dixon, Litt.D.	

President—John W. Scott, M.A.*Vice-President*—Hugh A. Reyburn.*Secretary*—Archibald A. Bowman, M.A., 26 Sutherland Terrace.*Treasurer*—R. W. Roxburn.*Members of Committee.*

Miss Reid, Miss Wylie, Dr. N. Smith, Messrs. Crichton, Robertson, and Cunnison.

GLASGOW UNIVERSITY HISTORICAL SOCIETY.

This Society has for its aim the stimulation of interest in the study of History among the students of Glasgow University. Its membership, however, is not confined to matriculated students but extends to all members of the University and to others not connected with College, who may make their desire to join known through members of the Committee. The annual subscription is one shilling.

Office-Bearers for Session 1906-7.

<i>Presidents</i>	{	Professor Medley.
		The Rev. Professor Cooper.
		Dr. W. S. M'Kechnie.

Secretary and Treasurer—John L. Morison, M.A., The University.*Committee.*

From the Staff—Kenneth K. M. Leys, B.A.; From Q.M. College—Misses Borthwick, Milligan, Robertson, Waddell, and Sennett. From the University Students—Messrs. James H. Cockburn, M.A.; W. M'Nicol; T. R. M'Rorie; and another to be elected in October.

GLASGOW UNIVERSITY ENGINEERING SOCIETY.

(Instituted 1891.)

The objects of this Society are the promotion of the study of Engineering and the Diffusion of Engineering information among the members, by the reading of papers, by discussions, by visits to Engineering works in progress, and by such other means as the Society shall approve.

The membership is open to all past and present Students of the University.

*Office-Bearers for Session 1906-7.**Honorary President*—John Ward, Esq.

<i>Honorary Vice-Presidents</i> —	{	Professor Archibald Barr, D.Sc., M.Inst. C.E.
		Professor J. H. Biles, LL.D., M.I.N.A.

President—John S. Nicholson, B.Sc.

Vice-Presidents—{ J. G. Johnstone, B.Sc., A.M.I.N.A.
 { H. Bamford, M.Sc.

Secretaries— { Charles McNeil, B.Sc., 1 University Gardens.
 { Thomas Buchanan, James Watt Laboratories.

Treasurer—Philip de Havilland Hall.

Minute Secretary—Alexander Gordon.

Committee.

Engineering.

Hubert N. Beilby, B.Sc.

A. Gordon.

N. J. Maclean, B.Sc.

Naval Architecture.

Ernest W. Russell.

W. S. Owen.

GLASGOW UNIVERSITY PHYSICAL SOCIETY.

This Society was founded in 1884 “for the discussion of scientific subjects in general, and the diffusion of scientific information among its members, by special communications, and any other means which the Society may from time to time approve.”

Meetings are held during the Winter Session on alternate Wednesdays at 3.45 P.M. The syllabus for the year is issued in autumn, and may be had from the Secretary after the commencement of the Winter Session.

All past and present students of the University who are interested in Physical Science, and others whose membership the council think would be desirable, are eligible for membership. It has been decided that Tea shall be provided at every meeting in the ensuing year. The subscription for the ensuing year has been fixed at Two Shillings and Sixpence.

The Office-Bearers are:—

Honorary President—Lord Kelvin, G.C.V.O., F.R.S.

President—Professor Gray, LL.D., F.R.S.

Vice-President—James Muir, D.Sc.

First Secretary—David B. Meek.

Second Secretary—James B. McVail.

Treasurer—Alexander D. Ross, M.A.

Letters should be addressed to the Secretary of the Society at the Physical Laboratory.

GLASGOW UNIVERSITY MISSIONARY SOCIETY.

(Instituted 1821.)

Office-Bearers for 1906-7.

Honorary President—Rev. W. S. Sutherland, M.A.

President—John A. Swan, M.A.

Vice-President—Herbert Dunn, M.A.

Superintendents of Home Missions—{ A. C. Baird, M.A., B.Sc.
J. D. Brown, M.A.

Senior Secretary—Matthew Biggar, M.A., Duncraggan, Polmont Station.

Junior Secretary—R. S. Armstrong, M.A.

Librarian—Neil M'Caig, M.A.

Treasurers—{ James H. Cockburn, M.A. (Senior).
R. H. Napier, M.A. (Junior).

Summer Committee.

The Office-bearers and Messrs. J. C. M. Fairlie, M.A., G. W. Walker, M.A.,
and H. C. M'Coll.

Members of Committee.

From Theology—

W. Napier Bell, M.A.

W. D. Macgill, M.A.

William Potter, M.A.

Allan M. M'Coll.

D. G. Milne.

From Arts—

J. Rossie Brown.

J. Millar.

R. M. Mathams.

From Law—

James S. Quig.

From Medicine—William M. Fairlie and Aidan G. W. Thomson.

Three Representatives from First Year Theology to be appointed in November.

GLASGOW UNIVERSITY CHRISTIAN UNION.

The object of this Society is the promotion of religious life and fellowship at the University.

The headquarters of the Union are at 65 Bank Street, where there are carried on weekly Bible-reading circles and daily Prayer Meetings. Other features of the work are: Monthly addresses by well-known preachers and meetings for the Study of Missionary and Social Problems.

Office-Bearers.

Hon. President—Professor Latta, D.Phil.

Hon. Vice-President—David K. Picken, M.A.

President—Robert H. Napier, M.A.

Vice-President—George Barclay.

General Secretary—W. L. Marsh, 31 Albert Road, E., Crosshill.

Assistant Secretary—W. Boyd Henderson.

Missionary Secretary—B. I. Macalpine.

Bible-circle-Secretaries—

Arts: S. F. Hunter, M.A. *Medicine*: James Cairns.

House Secretary—T. L. Turner, M.A.

Prayer Meeting Secretary.—J. A. Steele.

Treasurer—Henry Yellowlees.

Committee.

Tennant Sloan., M.A.

A. D. Muir.

Joseph Gray.

GLASGOW UNIVERSITY STUDENTS' SETTLEMENT SOCIETY.

This Society was founded in 1889 with the object of carrying on social, educative, and religious work.

The Settlement, consisting of residence, club-rooms, and halls, is situated at 10 Possil Road, Garscube Cross. The work takes various forms, including social clubs, Sunday meetings, a "Poor Man's Lawyer," a Medical Dispensary, and Savings Bank. In the residence there is accommodation for fifteen students, and those who desire to enter into residence should communicate at the beginning of the session with the Warden or Secretary.

Office-Bearers.

President and Warden—James Cunnison.

Secretary—John S. Boyd, 10 Possil Road, Glasgow.

Sub-Warden—J. W. Pratt.

General Committee.

John W. Scott, M.A.
John Miller.

Kenneth K. M. Leys, B.A.
William Boyd, M.A., B.Sc.

Finance Committee.

Prof. Henry Jones, LL.D.
Rev. D. Kirkwood, B.D.

R. Harvie Pirie, LL.B.
David Yellowlees, M.D., LL.D.
John S. Boyd.

GLASGOW UNIVERSITY TEMPERANCE SOCIETY.

The object of this Society is to unite those students in the University who are interested in the cause of Temperance and are anxious to work for its advance. This work it seeks to accomplish among the students by means of At Homes, Lectures, etc., while, outside the University, it carries on successful Temperance Mission Work at the Students' Settlement.

Office-Bearers for 1906-7.

Honorary President—Professor Henry Jones, LL.D.

Honorary Vice-Presidents.

Prof. Geo. A. Gibson, LL.D.
A. Cameron Corbett, M.P.
James Carslaw, M.A., M.B.

Prof. Macphail, M.B.
A. Bonar Law, M.P.
Robert D. Bell, M.A., M.B.

Miss Galloway.

President—Miss Mackie.

Vice-President—Wilfred L. Marsh,

Secretary—A. D. Marcus, the Union.

Treasurer—James Cunnison, Students' Settlement, 10 Possil Rd.

*Committee.**Arts—*

W. M'Lean.
J. Gray.
T. L. Turner, M.A.
A. W. Saunders.
G. D. Nisbet.

Science—

C. C. Mackintosh.

Medicine—

John Mowat.
James A. Stenhouse.
James Cairns.

From Queen Margaret College—Miss Thomlinson, Miss Armour, Miss M'Dowall, Miss Borthwick, Miss Christie, Miss Marwick, and Miss M'Whirter.

GLASGOW UNIVERSITY '88 MEDICAL CLUB.

The purpose of this Club is to encourage social intercourse among those who studied Medicine at Glasgow University in the years 1884-1888. A Triennial Dinner is held, and communications are addressed at that time to the Members of the Club in all parts of the world.

Office-Bearers for 1905-1908.

Chairman—R. M. Buchanan, M.B., C.M.

Secretary—T. K. Monro, M.A., M.D., 12 Somerset Place, Glasgow.

Committee.

John Adams, M.B., C.M.
T. C. Barras, M.B., C.M.
J. P. Boyd, M.B., C.M.
Andrew Davidson, M.A., M.D.
J. M'C. Johnston, M.A., M.D.
A. Brown Kelly, D.Sc., M.D.
H. L. G. Leask, M.D., C.M.

R. B. Lothian, M.B., C.M.
J. Wyllie Nicol, M.B., C.M.
L. R. Oswald, M.B., C.M.
C. E. Robertson, M.D., C.M.
John Rowan, M.B., C.M.
Wm. Roxburgh, M.D., C.M.
John Wright, M.B., C.M.

GLASGOW UNIVERSITY '93 CLUB.

The object of the Club is to promote intercourse among the Members by means of at least one annual reunion which shall be held as far as possible on the Friday before Christmas. The Membership is limited to students of the University of the session 1892-93.

Office-Bearers for 1906.

President—Rev. Robert Wiseman.

Vice-Presidents— { W. Adam Burns, M.B., Ch.B.
 { Hugh Robertson, M.B., F.R.C.S.E.

Secretary and Treasurer—Robert W. M'Clure, B.L.,
136 Wellington Street, Glasgow.

Committee.

J. Roy Tannahill.
A. H. Charteris, LL.B.
William K. Gillies, M.A.

Daniel Scott.
D. P. Fleming, LL.B.
J. C. Scott, M.A.

Rev. Campbell Taylor, M.A.

GLASGOW UNIVERSITY TWENTIETH CENTURY (ARTS) CLUB.

Membership of this Club is limited to (a) Students of the Moral Philosophy and English Literature Classes during the session 1900-1901, (b) Graduates in Arts of the year 1901, (c) elected Members.

The object of the Club is to encourage and perpetuate by social intercourse friendships formed during the College career, and to keep Members in touch with their Alma Mater. The Club at present consists of 122 Members, and there is at least one annual meeting.

The Office-Bearers for Session 1906-1907 are :

Honorary Presidents—Professors Robertson and Phillimore.

President—J. Rodger Haldane, LL.B., Advocate.

Vice-Presidents—{ Rev. A. W. Scudamore Forbes, B.D.
{ Norman A. Black, M.A.

Secretary and Treasurer—Rev. Gordon Quig, B.D.,
Corkerhill, by Govan, Glasgow.

Committee.

R. C. Young, M.A. | James Menzies.
Rev. W. W. Clark, M.A.

GLASGOW UNIVERSITY—NEW CENTURY LAW CLUB.

The object of the Club is to promote friendly intercourse among the Students of Law, by holding at least two social functions in the year.

All Students attending any of the Law Classes in the Glasgow University during the Sessions of 1900 to 1901, and 1901 to 1902, are eligible for Membership on payment of the annual subscription of One Shilling.

Office-Bearers.

Honorary Presidents.

Charles Scott Dickson, K.C.

John Boyd, Advocate, Sheriff-Substitute for Lanarkshire.

Professor William M. Gloag, B.A., Advocate, } *ex officio*.
Professor James Moir, LL.D., }

President—George D. Valentine, LL.B., Advocate.

Vice-Presidents { James Auld.
{ Weir Grieve, M.A.

Secretary and Treasurer—David Ross, Jr.,
2 Carlton Terrace, Kelvinside, North, Glasgow.

Committee.

Wm. Boyd Berry, LL.B.
Wm. E. Cameron, LL.B.
John A. Gulliland.
Alexander G. Kemp.

Wylie R. M'Intyre.
Ed. Rosslyn Mitchell, LL.B.
George J. Spreull, LL.B.
David Wilson.

GLASGOW UNIVERSITY OSSIANIC SOCIETY.

(Instituted 1828.)

The object of the Society is the discussion of subjects bearing on the language, literature, and customs of the Highlands. It meets in the Union on Friday evenings at seven during the winter session. All meetings are conducted in English with the exception of four, two of which are purely Gaelic, and two composite. Ordinary membership is open to all students, both men and women, interested in the Highlands.

Office-Bearers for Session 1906-7.

Honorary President—Professor Cooper, D.D.

President—Neil A. M. Johnson.

Gaelic Vice-President—R. C. Robertson.

English Vice-President—J. Macdonald Ross, M.B.

Secretary—J. J. Mackintosh.

Assistant-Secretary—M. M. Macrae.

Treasurer—D. M'Intyre.

Bard—Archibald Campbell.

Representative to Union—F. A. Steuart.

Members of Committee.

Messrs. Campbell and Leitch, and Miss MacKinnon.

With two members to be elected from first year's students in November.

THE CHURCH OF SCOTLAND UNDERGRADUATE SOCIETY.

The Society meets every Monday at 7.30 p.m. in the Union for the discussion of literary, social, and religious topics, and for the promotion of social intercourse among its members.

All undergraduate students connected with the Church of Scotland are eligible for membership. An undergraduate shall mean a student in any Faculty who has not graduated in that Faculty.

The annual subscription is one shilling for Union members and one shilling and sixpence for non-Union members.

Office-Bearers for 1906-07.

Honorary President—Professor Cooper, D.D.

President—J. W. Anderson, M.A.

Vice-President—David Bennett.

Secretary—A. H. Dunnett, The Manse, Kilmarnock.

Treasurer—R. M. Mathams.

Committee.

Messrs. Alexander Silver, Robert Jenkins, Robert E. Lee, M.A.,
A. Macdonald, G. D. Nisbet, D. M'Arthur, J. M'Morland.

GLASGOW UNIVERSITY UNITED FREE CHURCH STUDENTS' SOCIETY.
(Instituted 1845.)

Honorary President—Rev. Geo. H. Morrison, M.A., Glasgow.

President—William J. Baxter.

Vice-Presidents—S. F. Hunter, M.A., Alex. T. R. Yuille.

Secretary—Joseph Gray, Students' Union.

Treasurer—Matthew U. Baird.

Editor of Magazine—Roger G. M'Dowall.

Committee.

David Hair, Robert M. Bernard, M.A., Alfred M'Robert.
With one student from the first year in Arts and one from any other
Faculty to be elected in October.

This Society meets every Saturday at 10 a.m. in the Union. It is one of the oldest in connection with the University, having attained its Diamond Jubilee.

The objects of the Society are the promotion of social intercourse and the furtherance of moral and intellectual culture among its members.

All Students attending the University in any Faculty, who are connected with the United Free Church, are eligible for membership, which is obtained by the payment of the annual subscription of One Shilling and Sixpence. Students not connected with the above Church may become Associates.

GLASGOW UNIVERSITY ATHLETIC CLUB.

Office-Bearers for 1905-6.

Honorary President—Professor Medley, M.A.

Hon. Vice-Presidents—Professor Bower, Dr. John F. Fergus,
Messrs. Hugh Hutchison, D. T. Gwynne-Vaughan, and W. Copeland.

President—Stanley J. Gardner.

Hon. Treasurer—Dr. W. H. Lang.

Hon. Secretary—G. Haswell Wilson, The Union.

Committees of Sections—

Rugby Football—G. H. Wilson (Captain), Hugh G. Wilson (Vice-Captain), M. W. Halley, G. S. Milne, Stanley J. Gardner (Secy.).

Fives—C. J. Vincent, M.A. (Captain), Dr. James R. C. Greenlees, D. T. Gwynne-Vaughan, M.A., J. A. Henderson, H. G. Wilson, and J. Walter M'Leod (Secy.).

Golf—Professor Stockman (Captain), Ralph M. F. Picken, B.Sc., H. G. Robinson, J. W. Tait, A. J. Hutton (Match Secy.), Dr. F. J. Charteris, and J. K. Dunlop, M.A. (Joint-Secretaries).

Sports—Eric J. Dyke, M.B., Dr. Lang, Stanley J. Gardner, William C. Mackie, William W. McCowat, George H. Wilson, James P. Stark (Secy.).

Cricket—N. M. Barclay (Captain), John L. Morison, M.A. (Vice-Captain), J. A. Campbell, F. C. Macaulay, and A. Patrick. D. H. Wilson, M.A. (Secy.).

Executive Committee.

The Officials, Secretaries of Sections, with W. Mackie and Charles C. Fitzgerald.

The object of the Club is the promotion of all forms of Athletic exercise. The Membership is confined to present and past Students of the University.

Subscriptions: Athletic Club, Two Shillings and Sixpence, and in addition as follows: Rugby Football, Seven Shillings and Sixpence; Fives Club, Three Shillings; Golf Club, Three Shillings and Sixpence; Cricket, Three Shillings and Sixpence.

Inclusive Subscription, One Guinea.

THE UNIVERSITY COMPANY (K) 1ST L.R.V.

During session 1903-4 the old University Volunteer Company in connection with the First Lanark Rifles was revived, and at present in addition to non-University members the Company has between 70 and 80 students or ex-student members. Special terms of joining are offered to University students, whereby men require to sign on only for two years, and drills are arranged to suit students' class hours. Joining the company therefore involves (1) Recruit drills (twenty double drills) which Cadet Corps members need not perform if they have drilled on 40 occasions the season previous; (2) Ten drills with musketry practice for the second and subsequent years; (3) A camp attendance once in two years. The subscription is five shillings per annum. Details may be had from the O.C. K Company, Captain G. L. Hill, 4 Thornwood Terrace, Partick, Lieutenant Morison, The University, or Col. Sergt. G. D. Smith, 10 Park Avenue.

GLASGOW UNIVERSITY RIFLE CLUB.

President—The Very Rev. Principal Story, D.D., LL.D.

Vice-Presidents—Sir John Stirling Maxwell, Bart., and Professor Bower.

Team Captain—P. F. W. Edington, B.L. (Lieut., 1st L.R.V.),
157 West George Street.

Vice-Captain—F. W. Heys (Capt., 3rd Renfrew).

Secretary and Treasurer,—David J. Wallace, M.A., The Union.

Students' Convener—

Committee—T. E. Robinson (Major, 1st L.R.V., retired), Robert Carswell (Major, 1st L.R.V.), William Nelson (Major, 1st L.R.V.), Messrs. James R. Coats and Edward Darling.

Its objects shall be to promote rifle shooting among students and ex-students of Glasgow University, and to provide the means of having Glasgow University well represented, by a team consisting of five students and five ex-students, in the annual match for the Inter-University Trophy.

Glasgow University won the Trophy last year with a total of 821 points, Edinburgh being second with 742 points. Glasgow was represented by the following team at Darnley :

Ex-students—Messrs. Edington, Barker, Heys, M'Phie, and Coats.

Students—Messrs. Edward Darling, G. N. Kirkwood, M.B., R. B. Dick, D. E. Drummond, and D. J. Wallace, M.A.

All students and ex-students of Glasgow University shall be eligible as Patrons and Ordinary Members. All persons officially connected with the University shall be eligible as Patrons. Both classes of Members may take part in the competitions.

All persons, eligible as above, subscribing 10s. or upwards annually, shall be *ipso facto* Patrons. The subscription for Ordinary Members shall be 5s. for ex-students, and 2s. 6d. for present students, all payable by 1st March annually. These annual subscriptions may be commuted by a present payment of £3 3s., entitling the person paying to become a Life Patron.

GLASGOW UNIVERSITY CLUB, LONDON.

The objects of the Club are to maintain good fellowship among its members and so promote the interests of the University of Glasgow and of higher education in connection therewith.

Graduates, and all who are or have been students of the University of Glasgow, or officially connected with it, are eligible for membership.

Office-Bearers for 1906-1907.

President—

The Right Honourable Lord Kelvin, O.M., G.C.V.O., F.R.S., D.C.L., LL.D., Chancellor of the University.

Vice-Presidents—

Sir W. H. White, K.C.B.
 The Right Honourable Lord
 Balfour of Burleigh, K.T.
 Geo. A. Heron, M.D., F.R.C.P.
 The Very Rev. Principal Story,
 D.D., LL.D.

Professor John M. Thomson, F.R.S.
 The Right Honourable James A.
 Campbell, LL.D.
 Professor A. C. Bradley, LL.D.
 James Brisbane, M.D.

Council—

Lt.-Col. Wm. Babbie, V.C.
 Rev. A. J. Carlyle, M.A.
 Malcolm Mackintosh, M.D.
 Francis Elgar, F.R.S., LL.D.
 J. R. M'Ilraith, M.A., LL.B.
 D. S. Roxburgh, M.B.

J. G. Henderson, B.Sc.
 A. A. Jack, M.A.
 Guthrie Rankin, M.D., M.R.C.P.
 Professor Cormack, D.Sc.
 Archibald Craig, LL.B.
 James Smyth, M.B.

Honorary Treasurer—W. Walton Don, M.D., 466 Edgware Road, W.

Honorary Secretaries—

James M. Dodds, M.A., Dover House, Whitehall, S.W.
 C. O. Hawthorne, M.D., M.R.C.P., 63 Harley Street, Cavendish
 Square, W.

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